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THE REAUTHORIZATION OF THE TERRORISM RISK INSURANCE PROGRAM

HEARING

BEFORE THE

COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS UNITED STATES SENATE

ONE HUNDRED SIXTEENTH CONGRESS

FIRST SESSION

ON

EXAMINING THE STRUCTURE AND OPERATION OF THE TERRORISM RISK INSURANCE PROGRAM REAUTHORIZATION (TRIP), AND EXPLORING THE IMPACTS OF THE LEGISLATIVE CHANGES INCLUDED IN THE 2015 TRIP REAUTHORIZATION AND DEVELOPMENTS IN THE TERRORISM RISK INSURANCE MARKET

JUNE 18, 2019

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C O N T E N T S

TUESDAY, JUNE 18, 2019

WITNESSES

Additional Material Supplied for the Record

THE REAUTHORIZATION OF THE TERRORISM RISK INSURANCE PROGRAM

TUESDAY, JUNE 18, 2019

U.S. SENATE,
COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS,
Washington, DC.

The Committee met at 10:39 a.m. in room SD–538, Dirksen Senate Office Building, Hon. Michael Crapo, Chairman of the Committee, presiding.

OPENING STATEMENT OF CHAIRMAN MIKE CRAPO

Chairman CRAPO. The hearing will come to order.

Today we are joined by three witnesses who have evaluated and written extensively on the Terrorism Risk Insurance Program, including Mr. Tarique Nageer, Terrorism Placement and Advisory Leader with Marsh; Dr. Howard Kunreuther, the Co-Director of the Wharton Risk Management and Decision Processes Center; and Mr. Baird Webel, Specialist in Financial Economics with the Congressional Research Service.

The terrorist attacks on September 11, 2001, devastated U.S. citizens, households, and businesses. In the wake of those attacks, Congress passed and the President signed into law the Terrorism Risk Insurance Act of 2002 to establish the Terrorism Risk Insurance Program, or TRIP, and to stabilize the market for terrorism risk insurance.

Since then, Congress has reauthorized the program three different times in 2005, 2007, and 2015.

My goal in each reauthorization was to build on existing data to find ways for the private insurance industry to absorb and cover the losses for all but the largest acts of terror, ones in which the Federal Government would likely be forced to step in were the program not there.

Congress made several improvements to the program during the 2015 reauthorization. First, it increased the program trigger from $100 million to $200 million in increments of $20 million each year. Second, it increased aggregate retention amount of $2 billion each year eventually to an amount that will be based on average insurer deductibles; and third, it decreased the coinsurance rate from 85 percent to 80 percent in 1 percent increments each year.

That bill garnered overwhelming bipartisan support in the Senate with a vote of 93 to 4.

The Program is once again set to expire on December 31, 2020. Well ahead of that expiration date, the Banking Committee has already started meeting with key stakeholders and is exploring whether there are additional balanced reforms to improve the program and reduce taxpayer exposure without having a material negative effect on the cost and take-up rates for terrorism coverage.

In 2018, the Treasury Department issued a report on the program's effectiveness, which also discussed key developments in the marketplace for terrorism risk insurance.

In addition to Treasury concluding in the report that the program has accomplished its principle goals identified in TRIA, Treasury also observed that private reinsurance of terrorism risk has significantly increased under the program, and there is now increased private reinsurance capacity for the exposures that remain wholly with the private market under TRIP.

Each of today's witnesses have written extensively on the program's effectiveness, structure, and market developments.

In 2018, Dr. Kunreuther coauthored a report on the program, which found that, overall, TRIA has worked well. It has stabilized a very disrupted market in the aftermath of 2001, making terrorism insurance widely available and affordable. Take-up rates among enterprises, small and large, are rather high, and premiums, a few percentage points of what firms pay for their property insurance, even though cost and take-up rates vary widely by size, industry, geography, and line of business.

In its 2019 Terrorism Risk Insurance Report, Marsh discussed take-up rates as well as cost, geographic, and corporate trends in terrorism risk insurance in the United States as well as globally.

Marsh emphasized in the report that the Federal backstop created by TRIA and reauthorized as TRIPRA, along with similar public-private mechanisms that exist in other countries, remains crucial to the continued stability and health of the property terrorism insurance market.

Finally, the Congressional Research Service has published numerous reports, including one as recently as April 2019, providing a comprehensive overview of the program, its history, statutory changes in past reauthorizations, and key considerations for this Congress.

During this hearing, I look forward to hearing more about specific considerations in evaluating the program's effectiveness, how the program has evolved over time, how the marketplace has responded to changes to the program made by Congress in previous reauthorizations, what additional room exists to further reduce taxpayer exposure, and how market participants may react to changes in different program levers.

Again, I thank each of the witnesses for joining us today to share your perspectives and your research.

Senator Brown.

OPENING STATEMENT OF SENATOR SHERROD BROWN

Senator BROWN. Thank you, Mr. Chairman, for holding the Committee's first hearing on the reauthorization of the Terrorism Risk Insurance Program. It expires the end of next year, after the lapse at the end of 2014. We all understand we need to start early enough to make sure it does not happen again.

TRIA is critical to keeping our economy healthy. It is not just a program that helps in the event of a terrorist attack. Businesses rely on this insurance in order to get access to credit, even in healthy economic times. Without Government assistance, the insurance market would be unable to provide affordable insurance to these businesses, including small businesses, across our country.

While TRIA was initially designed to be temporary after 9/11, both parties have agreed several times since then that there is value in keeping it. People may hear the word "terrorism" and think this does not apply to their community, that only businesses in places like New York and Washington or big national landmarks would need to worry about insuring against terrorism.

But, unfortunately, terrorism is not confined to big cities, and the groups perpetrating it do not only come from abroad. Ohio communities that have faced threats from white supremacist groups know all too well this is a risk we all contend with.

That is why I am glad we have been able to work on it in a bipartisan way. We agree there are some issues that the free market just cannot solve on its own. This is one of them. It is an example of the kind of successful Government intervention that is only possible when we come together as a country.

Some in Congress would prefer the United States not make these kind of guarantees, whether it is for worker pensions, whether it is for Social Security, whether it is for mortgages and affordable housing or for health care or food for low-income families, or this issue for protections against economic destruction after terrorist attacks. Some politicians just are not interested in coming together on behalf of Americans that live in Mansfield or Cleveland or Boise or Idaho Falls.

I disagree and think the Terrorism Risk Insurance Program is emblematic of our ability to use Government to make the economy work better for everybody, especially during difficult times. As we look at other issues on this Committee, I hope we will remember the success of this program and our capacity to use Government to solve tough problems when we decide that is what we want to do.

In the last bipartisan authorization of TRIA, we worked to strike a balance, which seems to work well. By increasing the program trigger to $200 million, by gradually reducing the Government's share in the losses, we have made the program efficient without decreasing access to coverage. We have an opportunity to make the program even stronger by creating certainty in the marketplace through a long-term extension of the program, and I emphasize long term. I hope we can work together to do that.

Chairman CRAPO. Thank you, Senator Brown.

We will now proceed to our witnesses, and I will ask you to please give your oral remarks in the order I introduced you and again ask you to remember to watch that clock so that we can stay to your 5 minutes allocated and get to the Senators' questions.

With that, Mr. Nageer.

STATEMENT OF TARIQUE NAGEER, TERRORISM PLACEMENT AND ADVISORY LEADER, MARSH

Mr. NAGEER. Good morning, Chairman Crapo, Ranking Member Brown, and Members of the Committee. My name is Tarique Nageer, and I am the Terrorism Placement Leader at Marsh. I do appreciate the opportunity to speak with you today about this topic.

For our company, like many others, the impact of terrorism is deeply personal. Marsh & McLennan lost 295 colleagues and scores of business associates on 9/11.

As a leading risk advisor in the insurance market, Marsh & McLennan has a unique perspective on the Terrorism Risk Insurance Program.

Terrorism remains an evolving, expanding, and ever present risk, which underlies the importance of this program and ensuring the continued stability and health of the property and casualty terrorism insurance market.

We have seen a decline in both the frequency and severity of terrorist incidents in the United States over the last several years, and there have been no certified terrorism losses in the United States since TRIA was originally passed in 2002, but we cannot afford to be complacent. The Federal backstop created by TRIA restored insurance capacity during the critical post-9/11 period.

We at Marsh strongly support its reauthorization and modernization, including enhancing the existing public-private partnership.

Today my testimony will include four main areas. First, findings from the Marsh's 2019 Terrorism Risk Ins Report once again highlighted that terrorism risk is not only a big-business or big-city issue. Education entities with the most frequent buyers of terrorism insurance in 2018, while companies in hospitality, gaming, health care, life sciences, and nonprofits all landed in the top 10 of buyers. These organizations can be found anywhere, from small college towns to urban city centers.

The uptake for TRIA coverage and property policies averaged 62 percent in 2018. Clearly, a wide array of industries depend on the program to thrive and protect their workforce as they continue to purchase terrorism coverage at a high rate.

Second, I would like to provide an overview of the current state of the terrorism insurance market. While there have been no significant insured losses in recent years and the industry is well capitalized, the access to terrorism insurance is still dependent on insurer's preference, appetite, and aggregate constraints. There is a strong possibility that if the Federal backstop ceases to exist, we could see a dominant effect of increased pricing across multiple insurance lines, not just terrorism, with a likely result of a major marketplace disruption.

Third, I will speak about how TRIA plays an integral role in the availability and affordability of workers' compensation insurance. The impact of TRIA on the workers' compensation market makes clear that as long as the Federal backstop remains in place, there should be adequate capacity for workers' compensation terrorism coverage. Because of its State-regulated nature, workers' compensation policies cannot limit or exclude coverage for perils such as terrorism or nuclear, biological, chemical, or radiological, commonly known as NBCR.

NBCR events can lead to very large human life and economic losses, but coverage is not typically included in reinsurance contracts.

In 2014, the uncertainty around TRIA led some insurers to step back from insuring industries with high employee concentrations in certain cities. As insurers began to review policies extending beyond 2020, their willingness to insure risks in high-profile areas will likely decrease again, thus, leaving large populations of employees vulnerable.

Finally, we are already seeing an impact on policies that extend beyond 2020, with some insurers either seemingly unwilling to offer terrorism coverage beyond the expiration of TRIPRA or increase in prices to cover the additional risks to their portfolios.

Without a decision to reauthorize or extend, we expect to see sunset provisions on policies and higher costs as we move closer to December 31, 2020.

In Marsh's view, this legislation is a model public-private partnership that is instrumental in maintaining a vibrant marketplace by allowing insurers to provide adequate limits of terrorism insurance to the business community at affordable prices. A seamless renewal process with a robust reauthorization will keep the marketplace sustainable.

We encourage decisions to be made with a full understanding of the shifts and the nature of terrorism and how they can affect organizations and insureds alike.

Finally, thank you again to the Committee for holding this hearing 18 months in advance of the program's scheduled expiration. Time is of the essence, and I look forward to your questions.

Thank you.

Chairman CRAPO. Thank you.

Dr. Kunreuther.

STATEMENT OF HOWARD KUNREUTHER, PH.D., PROFESSOR OF DECISION SCIENCES AND PUBLIC POLICY AND CO-DIRECTOR OF THE WHARTON RISK MANAGEMENT AND DECISION PROCESSES CENTER, THE WHARTON SCHOOL, UNIVERSITY OF PENNSYLVANIA

Mr. KUNREUTHER. Chairman Crapo, Ranking Member Brown, and Members of the Committee, I very much appreciate the opportunity of testifying on the reauthorization of the Terrorism Risk Insurance Program. My name is Howard Kunreuther. I am the James G. Dinan Professor of Decision Sciences and Public Policy at the Wharton School, University of Pennsylvania, and Co-Director of the Wharton Risk Management and Decision Processes Center.

The Center was founded in 1985, with a mission to examine alternative strategies for dealing with low-probability, high-consequence events, based on an understanding of the decision processes of individuals, firms, and public-sector agencies.

As Chairman Crapo pointed out, we have produced several studies on the 2015 renewal of TRIA undertaken in consultation with key interested parties from the public and private sectors and other academic research institutions that are cited in my written testimony.

Given the limited time that I have available and the comments that Chairman Crapo has made and Representative Brown as well as my colleague here, Mr. Nageer, I want to focus on really a following question that was alluded to by Chairman Crapo: What modifications to the current public-private partnerships should be considered in the renewal of TRIA?

In developing these proposals, it is useful, in our opinion—and I will speak for a number of us at the Wharton Risk Center—to focus on the individual decision processes and our systematic biases that have been well documented by psychologists and behavioral economists, are discussed in our book "The Ostrich Paradox: Why We Underprepare for Disasters," written with my Co-Director, Robert Meyer.

Let me highlight five of these biases and indicate where they could be used and addressed with respect to the renewal of TRIA: first, myopia, the tendency to focus on short-time horizons when appraising immediate costs and the potential benefits of protective investments; amnesia, the tendency to forget too quickly the lessons of past disasters; optimism, the tendency to underestimate the likelihood that losses will occur from future hazards; simplification, the tendency to selectively attend to only a subset of relevant facts when making choices involving risk; and finally, herding, the tendency to base our choices on the observed actions of others who may not know a great deal more than we know ourselves in dealing with these low-probability events.

I will focus on four areas very briefly in the remaining time to highlight how they may play a role.

First, incentivizing cost-effective mitigation measures by firms, something that TRIA does not do today. To overcome the myopia bias, one could consider long-term mitigation loans, the way FEMA has done with respect to the flood problem, and at the same time have insurers offer premium discounts if the claims are going to be lower by firms investing in these mitigation measures.

Second, Federal protection against catastrophic losses. Now, in our view, in my view, it is important that the Federal Government cover NBCR, losses from future terrorist attacks, given the potential catastrophic losses and recoup their expenditures under TRIA. Currently, it is ambiguous as to exactly what will happen, although they have the intent to do that.

Now, the point I want to make here is Congress and the stakeholders should not exhibit an optimism bias or an amnesia bias by feeling it will not happen to the United States because it has not occurred to day.

Third, behavior of insurers and Congress after a terrorist attack. Will premiums significantly increase and future coverage decrease by insurers who might exhibit the simplification bias and focus on worst-case scenarios rather than thinking about likelihood as well? What will Congress do if insurers significantly raise their premium so that many commercial firms feel they cannot afford to purchase insurance protection?

On that basis, there is a suggestion that insurers consider a multi-year policy, a 2- or 3-year policy, so they keep this for more than just the 1 year and for that reason actually are in a position to deal with this afterwards.

Finally, dealing with interdependencies. There are a lot of events, like cyber, that are interdependent and have, can cause potentially catastrophic losses. Treasury and the private insurers should integrate and interact with each other on that issue.

So, in conclusion, Congress and other key stakeholders should examine how countries cope with terrorism risk to determine whether these approaches merit consideration for the United States.

And on that note, let me conclude my comments here and look forward to a dialogue with you afterwards.

Thank you.

Chairman Crapo. Thank you.

Mr. Webel.

STATEMENT OF BAIRD WEBEL, SPECIALIST IN FINANCIAL ECONOMICS, CONGRESSIONAL RESEARCH SERVICE

Mr. WEBEL. Thank you.

Mr. Chairman, Ranking Member, Members of the Committee, thank you for the opportunity to testify today. My name is Baird Webel. I am a Specialist in Financial Economics at the Congressional Research Service.

As a note for members of the audience who may not be familiar with the CRS, we are a division of the Library of Congress. Our role is to provide objective, nonpartisan research and analysis. CRS takes no position on the desirability of any specific policy nor advocates for any specific policy outcome.

I have been at CRS at this role since 2003, so I have seen the reauthorizations of TRIA since, and I would like to talk about three broad things that Congress has faced as we have done reauthorization in the past.

The first question that it faced is, basically, is a Federal terrorism program needed? TRIA was passed a little more than a year after the terrorist attacks in September 11, 2001. It was passed as a specifically temporary 3-year program, and by temporary, I do not mean that there was an expiration date, just an expiration date of 2005. The statute itself in two places says this is a temporary program.

As the end of previous reauthorizations have come up, Congress has successively seen the need to reauthorize the program to give the private market additional time to face the threat of terrorism losses, and I think a significant point in this is the difficulty in estimating terrorist events going forward and the losses from these events. The industry has been largely successful at rebuilding capital, but making estimates of future terrorism losses remains exceedingly difficult.

What Congress has done in the TRIA reauthorizations is basically affect the second aspect that I would talk about, namely how private insurers should share in funding terrorism risk with the Federal Government.

There are basically three different levers in the program that have been used in this sense. There is a deductible, and essentially, it is a two-stage deductible.

There is a program trigger, which is an aggregate amount of losses that the entire industry will incur before Federal funding occurs.

There is an individual insurer deductible which is set essentially based on the written premium for each insurer, a rough proximate size of its exposure to the terrorism market that must be cleared before Federal funding occurs.

And then after this, after these deductibles, there is an insured loss share compensation, and this is essentially a copay. So that once you clear the deductibles, there is a varying amount—there has been a varying amount of the share that the Government will cover.

Finally, there are terrorism loss spreading premiums. These are somewhat unusual in the insurance world in the sense that when we all purchase homeowners insurance or auto insurance, we pay our premiums upfront. In this case, the premiums are set to be after the fact, and so that depending on the exact loss levels, there will be a premium placed on insurance policies going forward to recoup the amount for the Government.

All of these over the life of TRIA have been adjusted in various ways to increase the private-sector exposure to terrorism risk.

And the third broad aspect that I would talk about is, What exactly should a Federal terrorism insurance program cover?

Right now, TRIA basically works through the private insurance market. Private insurance policies that are covered under the lines that are specified in TRIA—the private insurers are required to make terrorism coverage available under essentially the same terms and conditions for other types of insurance. So if you are going to cover loss from a fire, for example, from an accident, the insurer has to offer coverage for a fire due to loss from terrorism, but the insureds are not required to purchase this policy.

And the terms and conditions that apply to this are the same—it is the same for an accidental cause as it is for a terrorist cause, and this becomes particularly important in the realm of nuclear, chemical, biological, radiological, because most private insurance policies will exclude NCBR events, regardless of the source. So if a policy excludes a chemical spill from an accident from a train, it will exclude a chemical spill caused by a terrorist attack, and I think this is particularly significant because those are the terrorist attacks that could cause the most damage. And I am not certain that people realize to what degree these NCBR events would not be covered.

So, with the end of the 5 minutes, I will be happy to take any future questions.

Thank you.

Chairman CRAPO. Thank you, Mr. Webel, and I appreciate each of you. You all stayed within your 5 minutes. I appreciate that.

Mr. Webel, I will start with you. It is very important to me that the two major objectives will be achieved. One is that TRIA continually benefit and stabilize the marketplace, and the other is that we minimize taxpayer exposure.

What factors do you look at to indicate whether TRIA has been effective and to measure its potential future success in achieving these objectives?

Mr. WEBEL. I think that the take-up rate for terrorism policies is really important because you can see, for example, in the flood insurance program that you get flood disasters where a lot of people have not purchased flood insurance policies. And it is not going to help to have an insurance-providing program if you do not have the people purchasing the policies.

I think as well, any aspects that you can have of overall private reinsurance capacity, the amount of private insurance that it offered outside of TRIA is a really important marker of how well the private market is responding and developing capacity to deal with terrorism.

Chairman CRAPO. All right. Thank you.

I am going to move to you—is it "Nageer" or "Nagger"?

Mr. NAGEER. Nageer.

Chairman CRAPO. OK. Nageer.

In terms of the objective of assuring that we achieve the best possible protection of hitting a taxpayer bailout or a taxpayer cost here, we need to understand how changes that we make to the program can have an impact on both small and large participants, some insurers themselves.

So I guess the question I am asking is, Can you provide an indication of how smaller and larger insurers may be affected by changes in the coinsurance rate and the program trigger, respectively, based on our historical evidence?

Mr. NAGEER. Thank you for the question, Chairman Crapo.

As you know that in your original opening statement, there have been a few levers that have been adjusted during the course of the lifecycle of TRIPRA currently, and the insurers with adequate notice have been able to adjust to these incremental changes, either to the increased trigger levels or the increased coinsurance between a loss being shared between the Government as well as the private marketplace.

So in terms of having the ability and the capacity in the marketplace to be able to respond and take up increases in these different levers, the capacity does exist because there is adequate capital within the insurance and reinsurance market base for these types of incremental changes, but I stress the word "incremental," and I stress the word also with some good notice as well. So you have got to give them some time to sort of prep for these changes and make it incremental so they can adjust their buying of reinsurance for example, or being able to plan ahead and structure their—the book of business that they underwrite properly.

In terms of policyholders and insurers, who could be impacted by this, the very large insurers, one of the triggers under TRIPRA is the 20 percent insurer deductible, and how that works is 20 percent of the insurer's prior year's direct TRIPRA premium is retained by them for any one loss, before the Government co-shares the risk, the loss with them.

So for the very larger insurers, 20 percent is a big number, but my colleagues at Guy Carpenter have measured the policyholder surplus of insurers with less than $500 million of policyholder surplus, which is basically reserves. And there are about 662 insurers who fall within that category.

And a subset of that 662 is about 240 insurers who fall between the $100 million and $500 million of policyholder surplus, and those are the insurers who could be more directly impacted negatively with abrupt increases in the trigger levels. And the trigger in 2020 is going to be $200 million. So if you increased that gradually over time, yes, they could adjust for that, but that bucket of insurers within that $1 to $500 million policyholder surplus range are the ones who will be more impacted.

Chairman CRAPO. All right. Thank you.

Dr. Kunreuther, you in your testimony, I think, endorsed a notion of incentivizing mitigation, something which you indicated is not currently in TRIA; is that correct?

Mr. KUNREUTHER. That is correct.

Chairman CRAPO. Could you describe that in a little more detail what you are talking about there?

Mr. KUNREUTHER. I would be happy to.

I think the reason that I think mitigation is not included, number one, is it is always a challenge to get measures, but I think there is work that has been done.

I will highlight just at least the fact that Pool Re in the United Kingdom have actually had a number of ideas in terms and thoughts that they are working closely with the U.K. government to incentivize firms to actually invest in mitigation.

The basic idea in terms of what we are proposing here is that if you can spread the cost of the mitigation measure over time, you will have a much better chance of getting a successful investment in these measures because of the fact that people will not say—firms will not say or consumers will not say, which is the case certainly in the flood area, that "This is too costly for us. It is going to affect our bottom line tomorrow."

And when you have the opportunity of actually spreading this with loans that could be made—and that has been done by FEMA, Federal Emergency Management Agency, for flood—it could be done by banks and financial institutions, but it could be also done by Treasury or by a Government agency to encourage those investments. You then have the opportunity of actually making this attractive in the short run because insurers hopefully would then—actually reduce their premiums because the claims that they are going to have to face would be lower than they would be before, and the actual premium reduction would be greater than the cost of the loan each year. So it would be viewed attractive financially for firms to want to do that, and this has been shown with consumers in investing in mitigation measures against natural hazards that they will want to do that.

And that is the reason why we are suggesting it, to overcome a myopia bias.

Chairman CRAPO. All right. Well, thank you. That is very interesting. I appreciate that.

Senator Brown.

Senator BROWN. Thank you, Mr. Chairman.

Mr. Webel, I would like to start with you. Since the last reauthorization, there have been a number of tragic white supremacist attacks on synagogues and other places of worship in California, Florida, Minnesota, New York, Pennsylvania, South Carolina, and Texas. No amount, of course, of insurance money can make up for the lives lost and families torn apart.

Recently, the Jewish Federation of Cleveland has raised an issue about protecting thousands of people whom they serve each week. As religiously affiliated nonprofit organizations try to take action to protect their communities, they often find that insurance for these kinds of threats is hard to come by and very, very expensive. TRIA was implemented to make sure this kind of insurance was available.

My question is this: Do you think this situation, safety at houses of worship and other religious institutions, which we have been the target of threats and attacks, that that is the kind of problem TRIA was designed to address?

Mr. WEBEL. TRIA is designed to address terrorism, and it is a broad swath. It does not specify.

In one of the previous reauthorizations, they removed the requirement for it to be a foreign act of terrorism. So it does not make any distinction between the different types of terrorism. It just is terrorism as certified by the Secretary of the Treasury.

Senator BROWN. If insurance is available but priced so high that it is unaffordable, does that meet the spirit of Congress' intent?

Mr. WEBEL. The law is basically silent on that. It has a "make available" provision, but it does not include specifications on what that premium is supposed to cost.

Senator BROWN. Is not it sort of intuitive that if you cannot afford it, you really do not have access to it?

Mr. WEBEL. This is certainly an issue, and basically, implicitly what the law provides is there are specifications in State insurance law that premiums are not supposed to be excessive and so essentially above the cost of the risk.

So the TRIA essentially defaults to the State regulation of insurance. It does not do it directly from the Federal level.

Senator BROWN. So if congressional intent is all terrorism, as you suggest, and it is not affordable because State regulators have not given the priority to make it accessible and affordable, then perhaps it is our obligation on this Committee and in the House and Senate to pressure our State regulators to make it affordable?

Mr. WEBEL. That would be the lever that TRIA provides, yes, essentially.

Senator BROWN. Treasury used its discretion under the law to issue guidance clarifying TRIA's applicability to cyber-related risk. Do you think Treasury has the authority to make sure religious-affiliated institutions have real access to the Terrorism Risk Insurance Program?

Mr. WEBEL. I do not see under the statute, as currently designed, where Treasury would have a direct lever to do that.

Senator BROWN. Should it?

Mr. WEBEL. That is up to Congress.

Senator BROWN. Mr. Nageer, let me go through. Do you want to respond to that?

Mr. NAGEER. If I could, if you do not mind. So, just to add, the terrorism marketplace as we see it is quite competitive. There are lots of insurers, both on the property side, casualty side, and the terrorism side who have capacity to offer terrorism insurance for all ranges of motives, be it what you were just describing or what is conventionally known as acts of terrorism. So there is enough capacity within the marketplace, and I think to be able to—and TRIA served—in its initial creation of TRIA served to help create that vibrant marketplace.

Senator BROWN. Well, there is competition in the healthcare marketplace too, but to argue that it is always accessible——

Mr. NAGEER. Right.

Senator BROWN.——is another question. OK. Thank you for that.

Let me ask the three of you and start with you, Mr. Nageer. I have a couple questions. As we look to move on a reauthorization bill, should we make the extension for a longer period, and how long should it actually be, Mr. Nageer?

If each of you would give me a brief answer on that.

Mr. NAGEER. The last reauthorization was for 5 years. Before that, it was for 7 years. The 7 years worked quite well. So I think anywhere between 7 to 10 years would be a good outcome. It would allow the marketplace to adapt and grow, build capital, and be able to take on more of a trigger or a coinsurance mechanism, however you want to——

Senator BROWN. I like the way you negotiate. You say the last was 5, the one before was 7.

Mr. NAGEER. Correct.

Senator BROWN. So we should make it 7 to 10. I like that.

Yes, go ahead. Your answer too. Do you want to answer too?

Mr. KUNREUTHER. I would be happy to.

I think a longer period is always desirable, but I think there are tradeoffs in doing that because when you have a longer period, the question is, are there going to be changes or things that would require one to review this and whatnot? So to the extent that there are opportunities at least to have studies done that would enable one to somehow say on the basis of possible changes, one would want to deal with this in a different way, I think cyber is a very good example of that, by the way, because there are some real challenges as to how one is going to deal with cyber. And that would not have been necessarily true 5 or 10 years ago.

So I think I would favor, in general, a longer period of time. How long, I think is something that Congress and the stakeholders would have to discuss, because it gives people and gives firms the opportunity to plan more extensively than knowing that somehow things might be changed. And so I would move in that direction.

There is a saying—and I think TRIA exhibits it in a very good way—that nothing is more permanent than the temporary, and so, in some sense, what was viewed as a temporary has become more permanent for very good reason. So that is one of the reasons why we support the renewal very strongly.

Senator BROWN. Thank you, Mr. Kunreuther.

Mr. Webel?

Mr. WEBEL. We obviously do not have a position on the length.

I do think purely from the private-sector perspective, insurers certainly would be able to deal better with things the longer that it is, but I do think there is a very legitimate public policy perspective that Dr. Kunreuther said of taking a look at things more often to make sure that it is working.

Senator BROWN. Thank you.

Chairman CRAPO. Senator Tillis.

Senator TILLIS. Thank you, Mr. Chairman.

Gentlemen, thank you for being here.

Mr. Webel, I will not ask you this question because I know the answer. It has to do with supporting the reauthorization. Both of you all feel like we should reauthorize it, although, Professor Kunreuther, you have made some comments that I wanted to drill down on, and it really has to do—and I think, Mr. Nageer, you commented that the losses have been relatively low.

So how instructive are the current incidences to any sort of downward trend on risk premiums right now? I mean, are we seeing a downward trend based on the losses, or how do they project out actuarially and determine how much they actually have to collect to provide insurance at a reasonable price?

Mr. NAGEER. In terms of the marketplace, yes, it is a bit of a downward trend for this because the insurers, like I said, have all capitalized, and they have not had to pay major claims recently, right?

Senator TILLIS. Yeah.

Dr. Kunreuther, if we were going to look at—first, I do not believe we should have a permanent reauthorization because I do believe the world changes. The nature of the threats change, and it is Congress' role to update and reauthorize these programs.

I do think that we should have a discussion about what a reasonable planning horizon is so that we can optimize the products that the private sector can offer.

But if you take a look at the recoupment, the current recoupment policies, really the pyramid of how this program comes together, do you have any insights into specific areas that we should look at for any sort of modernization or reforms?

Mr. KUNREUTHER. Thank you for the question, Senator Tillis.

I think that one of the challenges with respect to terrorism and events that are very, very hard to estimate the risk is that when you have a recoupment, you are not pushing for a premium to be set on these very catastrophic losses that the Government would cover. And I think there are some real advantages to that in the sense that you are then saying you will have to pay it back with 140 percent in this particular case. So I would favor that aspect of it.

I think a real interesting question that needs to be put on the table as a part of the discussion is, What kind of risk transfer mechanisms are available in the form of reinsurance and catastrophe bonds, which are being used in other cases?

Senator TILLIS. That was going to be my next question.

Mr. KUNREUTHER. Oh, OK.

Senator TILLIS. No, that is a good one. Keep going.

Mr. KUNREUTHER. And how can that play an important role in providing the kind of protection that firms would actually want to have, that insurers would want to have in terms of knowing that they can cover it, and the Government might want to have?

I think Pool Re, as I mentioned earlier, in the United Kingdom has marketed a cat bond in order to be able to support very unusual losses that they might suffer in the United Kingdom, and that could be possibly considered by the Federal Government as well. And I think on that level, you could have a combination of the recoupment as well as these other forms of risk transfer, including private reinsurance.

Senator TILLIS. One of the questions, you brought up the point of mitigation, which has really been a thorn in my side on flood insurance program because we always talk about it, and we never do anything about it——

Mr. KUNREUTHER. Challenge.

Senator TILLIS.——in terms of investing and for a lot of reasons, cost being one of them.

But when you take a look at the nature of the threat, really the nature of the threat as it exists today versus 10 years ago, it would seem like there is only so much that we could do with respect to mitigation. Can you enlighten me on some of the concepts that are being discussed now?

Mr. KUNREUTHER. I think that is an excellent point in terms of saying that this is a real challenge with terrorism and on a couple of levels. That might not be the case with flood, where you can mitigate. You can elevate a structure.

Senator TILLIS. You know when the water is going to rise, and you can model that.

Mr. KUNREUTHER. Right.

Senator TILLIS. But you cannot necessarily model the next attempt to take down a building.

Mr. KUNREUTHER. I am not an expert at the moment but want to be more of an expert in the future. And I can comment that in the context of the United Kingdom, there are some suggestions for mitigation that they are now pursuing with the government, concrete structures, other ways to actually make these structures safer against terrorist attacks. And they are going to be working with insurers as well as with the government to try to deal with it.

I think one of the reasons that this is so important is because we all want to reduce these losses, and to the extent that you can do that, I think it might help.

Senator TILLIS. Well, I think that the more we become hardened, the fewer targets a terrorist would have. So I think it has a public safety benefit as well. It maybe takes out an entire tranche of either domestic or foreign terrorist. So, to me, it is a very interesting discussion to have as we move forward through the reauthorization to see if there is something as a matter of public policy that we should incent State, local, and private-sector entities to invest in, because at the end of the day, I think it could also reduce the Federal Government's downside risk.

Mr. KUNREUTHER. If I can make just one very quick point, it does also address the affordability issue.

Senator TILLIS. Yeah.

Mr. KUNREUTHER. If you then can have mitigation in place, premiums could come down, and some of the comments that were raised earlier could——

Senator TILLIS. And ultimately the cost of the mitigation itself——

Mr. KUNREUTHER. Yeah.

Senator TILLIS.——when you have a higher demand for it.

Thank you, Mr. Chair, and I look forward to us moving forward and getting the plan maybe modernized, but certainly reauthorized.

Mr. NAGEER. Senator, if I could add something else to Howard.

So, as we move from these hardened target, you get more better protected against those targets. Softer targets appear, and what we have been seeing is the act of terrorism impacts not only major cities, but it is also spread across the rest of the country, smaller cities, more softer targets, where a perpetrator can actually get in and do some serious damage because they cannot get into these hardened targets.

The interest of terrorism, we see it as being a nationwide hard, soft, small-city, big-city issue well across the country.

Senator TILLIS. Thank you.

Chairman CRAPO. Thank you.

Senator Menendez.

Senator MENENDEZ. Thank you, Mr. Chairman.

As a general matter, insurance markets in our country are private, and it is unusual to have any kind of Federal backstop, unless we have a public interest or a breakdown in the private market where a Government role is needed to restore functionality.

In the case of Terrorism Risk Insurance, in my view, we have both. If terrorists attack our Country, the United States has a national interest in minimizing the economic harm they inflict, and in terms of market functionality, private actors are inherently limited in the things they can do to evaluate and reduce their risk in this regard.

Insurance companies, for example, should not start their own intelligence agencies to improve their predictive models, and commercial real estate owners should not conduct counterterrorism operations to lower their premiums.

So I would like to ask our witnesses, if you can, to elaborate on what makes terrorism different from other risks and why a Federal backstop is, in fact, needed.

Mr. KUNREUTHER. I will be happy to start, and my colleagues will chime in.

I think one of the real challenges with terrorism is that it is so very difficult to estimate what the likelihood of a terrorist attack will be in the future. We have been very fortunate not to have had anything since 9/11, but the fact of the matter is that prior to 9/11, the insurers were not worried about this, and after 9/11, they became very worried, as we all know. And that is one of the reasons why TRIA got passed, and I think it was very important that it did get passed for the reasons you were mentioning, Representative Menendez. So I appreciate your question.

I think the fact that catastrophic losses and the potential for catastrophic losses will discover any private insurer from actually offering coverage, and TRIA does precisely that. It has the backstop of actually providing the protection, with a recoupment that I think is appropriate afterwards, for dealing with these large losses.

And then the insurers have now found, as Tarique has indicated with respect to his comments on the Marsh report, that there are really a number of firms that are now willing to buy coverage and all insurers are forced to offer it.

So I think this kind of partnership is the appropriate way. There are changes that we can discuss.

Senator MENENDEZ. The one thing about terrorism, as someone who offered all of the 9/11 Commission's recommendations into law when I was in the House of Representatives, is that we do not know what the next form of terrorism is going to be or its magnitude.

We never thought that an airplane, something used for civilian travel, would become a weapon of mass destruction.

We never thought that maybe cargo coming into a port could ultimately have a dirty bomb.

We never thought that an envelope laced with anthrax could be a deadly weapon.

So the iterations of what this is is always beyond even as we think ahead and try to prevent. It is a challenge. So I think it is a very unique one.

I mean, in order to obtain a real estate or commercial loan, banks often generally require clients to obtain terrorism coverage. Without terrorism risk insurance, businesses lose out on essential financing options, and I think allowing TRIA to lapse or injecting uncertainty in the process can have serious economic consequences.

Mr. Nageer, what happened to the commercial lending in real estate markets in 2014 when Congress allowed TRIA to expire for 12 days?

Mr. NAGEER. Thank you for the question, Senator Menendez.

So before I answer that question, I just want to add one thing to the modeling, your question before that.

TRIA—an act of terrorism is not like an act of nature, right? Someone actually has to decide, "I am going to perpetrate this act of terrorism." So that is very difficult for insurers to model, that uncertainty, that human element of it, and that is one of the issues.

Obviously, we have got a ton of data points on the reinsurance side for natural disasters. For catastrophic terrorism events, 9/11 is the key data point on the model, and it does not help. You cannot be predictable with that. You can determine the impact of these events, but you cannot predict them. So this is why it is very difficult for insurers to model it.

In terms of what happened in 2014, the uncertainty, it was very hectic. I was in the insurance market at that time, and insurers on property policies as well as workers' compensation policies, when they were considering policies which were going to go past December 31, 2014, started putting sunset provisions on policies, and a sunset clause is essentially a clause which says we elect—we reserve the right to change policies in terms of the limits, the coverages, and the prices for what we are offering you for terrorism insurance.

So once you got into the window of the TRIPRA potentially not renewing at the end of 2014, we saw a preponderance of these sunset classes on clients buying insurance, starting in January 1st of 2013.

As you go into the next renewal of 2020, any policy which renews comes into force on January 1, 2020, will expire January 1, 2021, and those policies have a high possibility of having these sunset clauses being put on it.

Senator MENENDEZ. Mr. Chairman, a final note.

I assume that if you are having a financial instrument, a loan, a mortgage, whatever, that has multiple years and your insurance is sunsetting within the context of that time period, that is going to make the lending institution far less desirous of making that a reality.

Mr. NAGEER. Absolutely.

And the lender requirements on construction deals, long-term construction deals, or clients with these lender requirements make it quote onerous because that client then has to go purchase insurance in an alternative market, which is going to be added cost to their construction project or whatever it may be. And that market is available, but maybe not to the extent to replace the limit the clients would have gotten on TRIA.

Senator MENENDEZ. Maybe so.

Thank you, Mr. Chairman.

Chairman CRAPO. Thank you.

Senator Reed.

Senator REED. Well, thank you very much, Mr. Chairman. Thank you, gentlemen.

Mr. Webel, could you please briefly describe how nuclear, biological, chemical, radiological terrorism events are treated under TRIA?

Mr. WEBEL. Sure. Thank you for the question.

NBCR is treated essentially like any other mode of attack. That is to say, it all works through the private insurance policies.

What is particular about NBCR is most private insurance policies would exclude this damage, regardless of whether it was an accidental event or whether it was a terrorist event, and if the private insurance policies exclude it, it is effectively excluded under TRIA.

So, for example, Senator Menendez just mentioned a dirty bomb or an anthrax attack. In reality, if a catastrophic attack occurred along those lines, it is entirely possible, if not likely, that TRIA coverage would not actually kick in because the private insurance policies that essentially underlie the TRIA coverage would not cover it.

Senator REED. In that context, as we reauthorize TRIA, do you have any suggested changes with respect to these NBCR policies?

Mr. WEBEL. It is difficult because the TRIA mechanism has worked really well through the private market and allowing the State regulators to do the things that they do, allowing the private insurance companies to do the things that they do.

It would certainly be possible from a generic perspective to put aspects of TRIA directly affecting those. In the original TRIA, there were terrorism exclusions that were nullified. So it is certainly within Congress' authority to do something like that with regard to NBCR.

It would also be possible to put more incentives, essentially, into it. There have been proposals in the past to lower the deductibles, lower the trigger, lower the co-shares for an NBCR event, essentially incentivizing insurers to make the coverage or perhaps a mixture of the two approaches.

Mr. KUNREUTHER. Could I just make one comment following up on Mr. Webel's point?

I think that TRIA always had the intent that if the private insurers were not covering NBCR, then there would be some coverage by the Federal Government, if there was an NBCR loss, but it was sort of ambiguous in the sense that it was not really explicitly stated.

But after the passage of TRIPRA in 2015, there was a comment by Treasury that they would be doing that.

I think if one explicitly had that in the legislation that the Federal Government would cover that, it would avoid any of the uncertainty as to what might happen if there was an NBCR attack.

Senator REED. Thank you.

Mr. WEBEL. But I think the question is what the mechanism would be because the mechanism for covering losses all works through the private insurance policies. It is a reimbursement to private insurance companies that have sustained losses. If they are not effectively sustaining losses because of the exclusion, how that mechanism would work is very unclear.

Mr. KUNREUTHER. And the only suggestion that I would make on that is that there would be a recoupment——

Mr. WEBEL. Yes.

Mr. KUNREUTHER.——afterwards with respect to that, and that would be explicitly stated.

Senator REED. The environment has obviously changed since we first passed the TRIA Act, Mr. Webel. What things should we do for this changing environment?

I know, again, my colleague, Senator Menendez, was talking about who would have thought of an envelope with anthrax, *et cetera*. Certainly, in the realm of cyber, who would have thought that and name the possible catastrophes? Is there any advice about changes?

Mr. WEBEL. I think that cyber is the thing that people are looking at as the new threat, and Treasury specifically came out in 2016 and said the newly created cyber liability line of insurance would be covered under TRIA.

So to the extent the private policies are covering cyber, again, it would do so, but I think that there is certainly the possibility of using the TRIA model or incentivizing or encouraging the market for cyber by explicitly including it in TRIA in some way because I think it is also a little unclear in terms of the damages that are being incurred in a cyber attack and whether that would meet triggers, whether that would meet deductibles and the like. And that is, I think, a real issue.

Senator REED. Well, thank you all, gentlemen, for your testimony. I appreciate it very much.

Thank you, Mr. Chairman.

Chairman CRAPO. Thank you, Senator Reed.

And that concludes the questioning for today's hearing.

For Senators who wish to submit questions for the record, those questions are due by Tuesday, June 25th.

To our witnesses, I suspect you may get a fair number of those because, as you can see, there were a number of other hearings and other interruptions today that caused us to not even be able to get a quorum for our Executive Session. So I think a lot of the Senators are probably going to submit some questions to you. We ask that as you receive those questions that you respond as promptly as you can.

Again, we want to thank you for your expertise and for sharing your wisdom as well as your research with us today, and this hearing is adjourned.

[Whereupon, at 11:33 a.m., the hearing was adjourned.]

[Prepared statements, responses to written questions, and additional material supplied for the record follow:]

PREPARED STATEMENT OF CHAIRMAN MIKE CRAPO

Today, we are joined by three witnesses who have evaluated and written extensively on the Terrorism Risk Insurance Program, including Mr. Tarique Nageer, Terrorism Placement and Advisory Leader with Marsh; Dr. Howard Kunreuther, Co-Director of the Wharton Risk Management and Decision Processes Center; and Mr. Baird Webel, Specialist in Financial Economics with the Congressional Research Service.

The terrorist attacks on September 11, 2001, devastated U.S. citizens, households and businesses.

In the wake of those attacks, Congress passed and the President signed into law the Terrorism Risk Insurance Act of 2002 to establish the Terrorism Risk Insurance Program, or TRIP, and to stabilize the market for terrorism risk insurance.

Since then, Congress has reauthorized the Program three different times in 2005, 2007, and 2015.

My goal in each reauthorization was to build on existing data to find ways for the private insurance industry to absorb and cover the losses for all but the largest acts of terror, ones in which the Federal Government would likely be forced to step in were the program not there.

Congress made several improvements to the Program during the 2015 reauthorization. It increased the program trigger from $100 million to $200 million in increments of $20 million each year; increased the level below which insurers are subject to mandatory recoupment $2 billion each year to what is now a floating amount based on insurers' deductibles; and decreased the coinsurance rate from 85 percent to 80 percent in 1 percent increments each year.

That bill garnered overwhelming bipartisan support in the Senate with a vote of 93 to 4.

The Program is once again set to expire on December 31, 2020.

Well ahead of that expiration date, the Banking Committee has already started meeting with key stakeholders and is exploring whether there are additional balanced reforms to improve the Program and reduce taxpayer exposure without having a material negative effect on the cost and take-up rates for terrorism coverage.

In 2018, the Treasury Department issued a report on the Program's effectiveness, which also discussed key developments in the marketplace for terrorism risk insurance.

In addition to Treasury concluding in the report that "The Program has accomplished its principle goals identified in TRIA," Treasury also observed that "Private reinsurance of terrorism risk has significantly increased under the Program, and there is now increased private reinsurance capacity for the exposures that remain wholly with the private market under TRIP."

Each of today's witnesses has written extensively on the Program's effectiveness, structure and market developments.

In 2018, Dr. Kunreuther co-authored a report on the Program, which found that "Overall, TRIA has worked well. It has stabilized a very disrupted market in the aftermath of 2001, making terrorism insurance widely available and affordable. Take-up rates among enterprises small and large are rather high and premiums a few percentage points of what firms pay for their property insurance, even though cost and take-up rates vary widely by size, industry, geography, and line of business."

In its 2019 Terrorism Risk Insurance Report, Marsh discussed take-up rates, as well as cost, geographic and corporate trends in terrorism risk insurance in the United States, as well as globally.

Marsh emphasized in the report that " . . . the Federal backstop created by TRIA and reauthorized as TRIPRA—along with similar public-private mechanisms that exist in other countries—remains crucial to the continued stability and health of the property terrorism insurance market."

Finally, the Congressional Research Service has published numerous reports, including one as recently as April 2019, providing a comprehensive overview of the Program, its history, statutory changes in past reauthorizations and key considerations for this Congress.

During this hearing, I look forward to hearing more about: specific considerations in evaluating the Program's effectiveness; how the Program has evolved over time; how the marketplace has responded to changes to the Program made by Congress in previous reauthorizations; what additional room exists to further reduce taxpayer exposure; and how different market participants may react to changes in different Program levers.

Thank you all for joining us today to share your perspectives and research.

PREPARED STATEMENT OF SENATOR SHERROD BROWN

Thank you Senator Crapo for holding the Committee's first hearing on the reauthorization of the Terrorism Risk Insurance Program. While the Program expires at the end of next year, after the lapse at the end of 2014 we all understand that we need to start early to make sure that does not happen again.

The Terrorism Risk Insurance Program is critical to keeping our economy healthy. TRIA isn't just a program that helps in the event of a terrorist attack. Many businesses rely on this insurance in order to get access to credit, even in healthy economic times. Without Government assistance, the insurance market would be unable to provide affordable insurance to these businesses, including small businesses, across the country.

While TRIA was initially designed to be temporary after 9–11, Republicans and Democrats have agreed several times since then that there is value in keeping it. People may hear the word "terrorism" and think this doesn't apply to their community, that only businesses in places like New York and Washington or big national landmarks would need to worry about insuring against terrorism.

But unfortunately, terrorism isn't confined to big cities and the groups perpetrating it don't only come from abroad. Ohio communities that have faced threats from white supremacists groups know all too well that this is a risk we all have to contend with.

That's why I'm glad we've been able to work on it in a bipartisan way. We all agree there are some issues that the free market just can't solve on its own. This is one of them, and it's an example of the kind of successful Government intervention that is only possible when we come together as a country.

There are some in Congress who would prefer the United States not make these kinds of guarantees—whether it's for workers' pensions and Social Security, for mortgages and affordable housing, for healthcare and food for low-income families, or for protections against economic destruction after terrorist attacks. Some politicians just aren't interested in coming together on behalf of Americans that live in Mansfield or Cleveland or Chillicothe in Ohio, or in Boise or Idaho Falls from the Chairman's State.

I disagree, and I think the Terrorism Risk Insurance Program is emblematic of our ability to use Government to make the economy work better for everybody, especially during the most difficult of times. As we look at other issues on this Committee, I hope we will remember the success of this program, and our capacity to use Government to solve tough problems when we work together.

In the last bipartisan authorization of the Program, we worked to strike a balance, which seems to work well. By increasing the program trigger to $200 million and gradually reducing the Government's share in the losses, we've made the program efficient without decreasing access to coverage. We have an opportunity to make the program even stronger by creating certainty in the marketplace through a long-term extension of the program. I hope we can work together to do that.

I look forward to hearing the witnesses' testimony today.

Thank you, Mr. Chairman.

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Testimony of

Tarique Nageer,
Terrorism Placement and
Advisory Leader, Marsh,
Before the United States Senate Committee
on Banking, Housing, and Urban Affairs

The Reauthorization of the
Terrorism Risk Insurance Program

June 18, 2019, Washington

MARSH & McLENNAN COMPANIES

Good morning, Chairman Crapo, Ranking Member Brown and members of the Committee. My name is Tarique Nageer, and I serve as the terrorism placement and advisory leader within Marsh's US Property Practice. Thank you for giving me the opportunity to appear before you today and share Marsh's perspective on the Terrorism Risk Insurance Program Reauthorization Act (TRIPRA) ahead of its expiration at the end of 2020.

As a global leader in insurance broking and risk advisory services, Marsh has a unique perspective on the terrorism insurance and reinsurance marketplace. And for our company, the impact of terrorism is deeply personal. Our parent company, Marsh & McLennan Companies, lost 295 colleagues and scores of business associates in the September 11, 2001, attack on the World Trade Center.

9/11 was the original impetus for the passage of the Terrorism Risk Insurance Act (TRIA) in 2002, which created a federal reinsurance backstop for terrorism losses. Since then, we have seen the emergence of new terrorism threats, including cyber-attacks, which is why we welcomed the December 2016 United States Treasury Department guidance clarifying that standalone cyber liability insurance policies are included under the Terrorism Risk Insurance Program.[1]

As perpetrators continue to shift their tactics, risk professionals have been challenged to find the right strategies to protect their companies and people. As Michael McGarrity, assistant director within the FBI's Counterterrorism Division, noted during a May 2019 hearing[2] before the House Committee on Homeland Security, threats to the United States have "expanded from sophisticated, externally directed plots to include individual attacks carried out by [homegrown violent extremists]." He added that law enforcement still "face[s] significant challenges in identifying and disrupting [homegrown violent extremists] and domestic terrorists."

Amid these changes, one certainty remains: Despite its ebbs and flows, terrorism remains an evolving, expanding and ever-present risk, which underlines the importance of the Terrorism Risk Insurance Program and its role in ensuring the continued stability and health of the property and casualty terrorism insurance markets.

Other countries have also established public-private risk-sharing mechanisms, with coverage typically triggered by a national government's declaration that an event was a terrorist attack (see Figure 1). It's important to note that unlike some other mechanisms—including the UK's Pool Re and France's Gestion de l'Assurance et de la Réassurance des risques Attentats et Actes de Terrorisme (GAREAT)—TRIPRA does not tap into the private market for reinsurance, and losses are funded and spread throughout the industry after an event has occurred.

[1] United States Department of Treasury. *Guidance Concerning Stand-Alone Cyber Liability Insurance Policies Under the Terrorism Risk Insurance Program.* December 27, 2016.

[2] Michael McGarrity. Testimony in front of Homeland Security US House of Representatives. *Confronting the Rise of Domestic Terrorism in the Homeland.* May 8, 2019. https://docs.house.gov/meetings/HM/HM00/20190508/109406/HHRG-116-HM00-Wstate-McGarrityM-20190508.pdf

Figure 1

Public/Private Terrorism Risk-Sharing Mechanisms

SOURCE: MARSH, GUY CARPENTER, US GOVERNMENT ACCOUNTABILITY OFFICE, WORLD FORUM OF CATASTROPHE PROGRAMMES, ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

Country	Terrorism Pool or Reinsurance Mechanism	Year Est.	Policyholder Coverage
Australia	Australian Reinsurance Pool Corporation (ARPC)	2003	Elective
Austria	Österreichischer Versicherungspool zur Deckung von Terrorrisiken (The Austrian Terrorpool)	2002	Elective
Bahrain	Arab War Risks Insurance Syndicate (AWRIS)	1981	Elective
Belgium	Terrorism Reinsurance & Insurance Pool (TRIP)	2007	Elective For Large Property Risks
Denmark	Danish Terrorism Insurance Scheme	2010	Elective
Finland	Finnish Terrorism Pool	2008	Elective
France	Gestion de l'Assurance et de la Réassurance des risques Attentats et actes de Terrorisme (GAREAT)	2002	Mandatory
Germany	Extremus Versicherungs-AG	2002	Elective
Hong Kong - China	Motor Insurance Bureau (MIB)	2002	Elective
India	Indian Market Terrorism Risk Insurance Pool (IMTRIP)	2002	Elective
Indonesia	Indonesian Terrorism Insurance Pool (MARIEN)	2001	Elective
Israel	The Victims of Hostile Actions (Pensions) Law and The Property Tax and Compensation Fund Law	1970/ 1961	Mandatory
Namibia	Namibia Special Risk Insurance Association (NASRIA)	1987	Elective
Netherlands	Nederlandse Herverzekeringsmaatschappij voor Terrorismeschaden (NHT)	2003	Elective
Northern Ireland	Criminal Damage Compensation Scheme Northern Ireland	1972	Elective
Russia	Russian Anti-Terrorism Insurance Pool (RATIP)	2001	Elective
South Africa	South African Special Risk Insurance Association (SASRIA)	1979	Elective
Spain	Consorcio de Compensación de Seguros (CCS)	1941	Mandatory
Sri Lanka	Strike, Riot Civil Commotion and Terrorism Fund – Government	1987	Elective
Switzerland	Terrorism Reinsurance Facility	2003	Elective
Taiwan	Taiwan Terrorism Insurance Pool	2004	Elective
United Kingdom	Pool Reinsurance Company Limited (POOL RE)	1993	Elective
United States	Terrorism Risk Insurance Program Reauthorization Act of 2015 (TRIPRA)	2002	Elective

The presence of private-public mechanisms in different countries shows the importance of a joint approach in helping to mitigate the economic threats posed by terrorism. Over the last decade, more than 230,000 people have been killed by terrorists and other non-state actors globally, according to Jane's Terrorism and Insurgency Centre from IHS Markit. Every terrorism attack shatters lives, instills fear, and disrupts business. Its financial impact is widespread: The Institute for Economics & Peace estimates that terrorism cost the global economy $415 billion between 2013 and 2017,[3] highlighting the need for organizations, insurers and governments to put this risk at the top of their agendas.

We have seen a decline in both the frequency and severity of terrorist incidents in the US in the last several years, and there have been no certified terrorism losses to the country since TRIA was originally passed in 2002. But we cannot afford to be complacent. The federal backstop created by TRIA restored insurance capacity during the critical post-9/11 period. We at Marsh strongly support its reauthorization and modernization, including enhancing the program's public-private partnership element and tapping into newer coverage possibilities. These include alternative risk transfer solutions, such as catastrophe bonds and parametric, or event-based, solutions.

My testimony today will include four main sections:

- I will start with key highlights from Marsh's 2019 Terrorism Risk Insurance Report,[4] released in May (Appendix A).
- Second, I will discuss current trends in the commercial insurance and reinsurance markets, along with the policy options before this committee and other legislators.
- Third, I will talk about the impact of TRIPRA on the workers' compensation market.
- Fourth and finally, I will discuss the implications of TRIPRA not being reauthorized or a decision on its reauthorization being pushed too close to the expiration date.

Highlights from the 2019 Terrorism Risk Insurance Report

Marsh's *2019 Terrorism Risk Insurance Report* explores the state of terrorism and the terrorism insurance marketplace in key regions, leveraging insurance market insights, and data and rankings from Marsh's *World Risk Review* ratings system. Key findings from the report include the following:

- Between May 2018 and May 2019, risk ratings fell in 116 countries and increased in 34, with little improvement noted in the world's riskiest countries, including Afghanistan, Yemen, and Iraq. Despite an overall improvement, terrorism is a dynamic threat, and it

[3] Institute for Economics & Peace. Global Terrorism Index 2018: Measuring the impact of terrorism, Sydney, November 2018. Available from: http://visionofhumanity.org/reports

[4] Marsh. *2019 Terrorism Risk Insurance Report.*

is certain that new threats will arise. While religious extremism is expected to remain the dominant terrorism threat around the world, we are also seeing an increase in lone wolf attacks, including against "soft" targets with limited security.

- The US remains the world's largest buyer of terrorism insurance, with US-based companies continuing to purchase coverage at a high rate. The take-up, or purchase, rate for TRIPRA coverage embedded in US property insurance policies remained at 62% in 2018 (see Figure 2).
- Education entities had the highest industry-specific terrorism insurance take-up rates in 2018, followed by media organizations and financial institutions (see Figure 3), underlining how industries across the board depend on TRIPRA. Due to their perceived vulnerability, transportation and hospitality and gaming companies had the highest percentage spend on terrorism coverage as part of their overall premium spend, 8% and 7% respectively.
- Many companies obtain terrorism insurance through captive insurers that they own and use to underwrite various risks, often with more favorable pricing and terms and conditions. In 2018, 182 Marsh-managed captive insurers accessed TRIPRA to write property, workers' compensation, general liability, and cyber risk for their parent companies, an increase of 10% over 2017.
- Take-up rates remained highest in the metropolitan areas — Atlanta, Chicago, New York, and San Francisco had the highest percentage of companies purchasing terrorism insurance in 2018 while companies in Atlanta, Los Angeles, and New York spent the most on terrorism insurance as a percentage of total premiums.

Figure 2

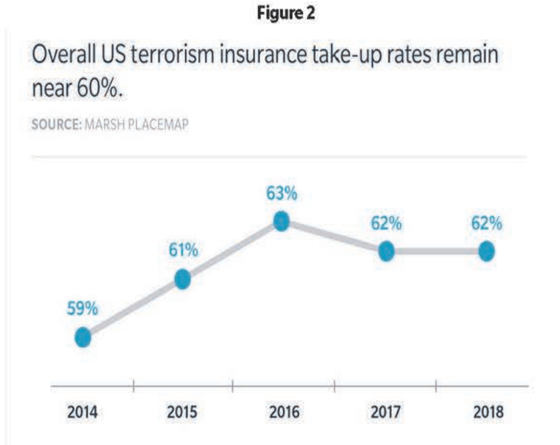
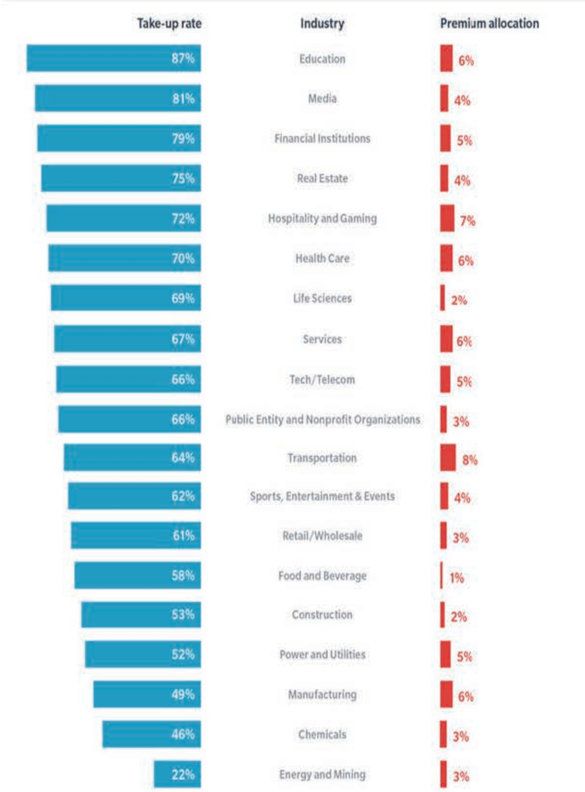


Figure 3

Education entities bought terrorism insurance most frequently in 2018; transportation companies allocated the largest share of overall premium.

SOURCE: MARSH PLACEMAP



Current State of the Terrorism Insurance Market

Overall property terrorism insurance capacity remains abundant, mostly due to few significant losses in recent years, and both incumbent insurers and new entrants committing to underwriting terrorism risk. In 2018, property terrorism insurance rate trends were consistent with past years, with pricing being typically lower for larger companies.

The global insurance markets have adapted to shifts in attack methodologies, and we would expect threats to continue becoming more diverse and complex as cyber and drones add to the array of possible attacks, the range of credible nuclear, biological, chemical, and radiological scenarios broadens, and a degree of strategic leverage elevates otherwise simplistic attacks (See Figure 4).

Figure 4

A maturing market meets an evolving and expanding peril

Source: Guy Carpenter

Some recent tactics by terrorists are less sophisticated than what we saw on 9/11. For example, in the London Bridge attack, which marked its second anniversary earlier this month, assailants deployed bladed weapons and vehicles. A vehicle was also used in the October 2017 attack that killed eight people after a man drove a rented pickup truck into cyclists and runners on the Hudson River Park's bike path. And firearms were used in the March 2019 shootings that took place in a mosque in Christchurch, New Zealand.

While these new methodologies tend to generate relatively little property damage, the impact on businesses can be severe. For example, in the wake of the aforementioned London Bridge attack, police cordons remained in place for 10 days, leading to widespread business interruption losses, estimated by Pool Re at £1.4 million (close to $1.8 million). In response, we have seen some insurers offer new coverage options to businesses. And according to the Insurance Information Institute, business interruption costs represented 31% of the losses emanating from the 9/11 attack, followed by property losses at 19%.[5]

According to AM Best, the US property and casualty market is expected to register a $12.1 billion underwriting loss in 2018.[6] Driven primarily by catastrophe losses from Hurricane Harvey and other natural disasters, this is the third consecutive year of unprofitability for the industry. If overall capacity erodes from the market—meaning that insurers and reinsurers restrict the amount of capital they are willing to put at risk—we could see increases not only in pricing for property insurance, but also for other lines of business, including terrorism coverage.

According to our sister company Guy Carpenter, global dedicated reinsurance capital is estimated to be $440 billion; dedicated reinsurance capital in North America is estimated to be between $120 billion and $140 billion. Reinsurance capacity for terrorism, however, is dependent on a reinsurer's preference, appetite, expertise, and aggregate constraints.

Of special interest is coverage for nuclear, biological, chemical, or radiological (NBCR) attacks, which are not typically covered by reinsurance programs, but can lead to very large losses that in some cases can exceed insurers' surplus. The Reinsurance Association of America estimates that the insured property and workers' compensation loss potential from a large nuclear detonation in midtown Manhattan could be $807 billion, while a biological attack—for example, using anthrax—in New York could lead to property and workers' compensation losses of approximately $624 billion (see Figure 5). Uncertainty about TRIPRA's future is already prompting insurers and terrorism insurance buyers to seek additional reinsurance limits and coverages, on the assumption that there is limited capacity available in the private market, especially for NBCR events.

[5] Insurance Information Institute.

[6] AM Best. "Best's Market Segment Report: U.S. Property/Casualty Insurance Industry Set to Post Third Straight Underwriting Loss for 2018," available at http://news.ambest.com/presscontent.aspx?altsrc=108&refnum=27672, accessed 10 June 2019.

Figure 5

Large Loss Scenario Consideration

September 11, 2001

•$46.3B (2018 dollars)[1]

Largest Modeled Conventional Terrorism Losses[2]

•10-ton Truck Bomb $44.8B (Los Angeles)

•Workers Compensation: over 150 losses > $10B

Largest Modeled NBCR Losses[2]

•Nuclear Detonation	$807B	(New York)
•Biological (Anthrax)	$624B	(New York)
•Chemical (Sarin Gas)	$ 15B	(Chicago)
•Radiological:	$134B	(New York)

Notes:

1.2018 dollars based on Bureau of Labor statistics CPI Index

2.Modeled in RMS v18, Occurrence loss figures assume 100% Property & WC take-up rates among commercial insureds. All other lines of business: Life, Liability, Business Interruption etc., are excluded.

3.Industry capital figures presented assume 100% 12/31/2018 of capital is available, or deployed, to cover terrorism. In reality, many (re)insurers – particularly capital/convergence markets – have limited appetite to write terrorism due to the correlation with a financial markets loss.

4.Estimated dedicated capital figure is a joint estimate with A.M. Best and includes capital dedicated to both P&C and L&H lines

5.Estimated capital for North American P&C lines estimate uses current ceded premiums as the base level

Source: Guy Carpenter

A long-term reauthorization of TRIPRA should allow the reinsurance market to continue to assume more risk and provide insurers with additional terrorism capacity at a constant and measured pace. If, however, TRIPRA is allowed to expire at the end of next year or is renewed with substantial increases in cedent retentions, we believe that terrorism-exposed insurers with under $500 million in surplus will likely need to purchase additional private reinsurance market capacity both to help protect capital and satisfy rating agencies and regulators. This is likely to lead to multiple insurers trying to simultaneously access the private reinsurance market's limited overall capacity. The impact this would have on the aggregate US reinsurance sector capacity and pricing is not clearly known.

Impact Extends to Employers and Workers

Allowing TRIPRA to expire or lapse will also likely have an immediate impact on workers' compensation. As the end of 2019 approaches, employers will soon begin negotiations for policies that incept in early 2020, many of which will extend past the current TRIPRA expiration.

Participation by employers in workers' compensation systems is mandatory in nearly all states. It is worth noting that in the world of insurance, workers' compensation policies are unique: Unlike other forms of commercial coverage, workers' compensation policies do not include any stated policy limits, nor can they limit or exclude coverage for perils such as terrorism losses. Instead, insurers can only reduce their aggregate workers' compensation terrorism exposure by limiting the number of employers for which they underwrite coverage in certain areas.

Traditionally, insurers have monitored workers' compensation aggregations—an insurer's cumulative insured employee concentrations in a geographic area—to assess the potential impact that an earthquake would have on their books of business. However, after the 9/11 attacks, workers' compensation insurers and reinsurers immediately focused on employee concentrations in large cities that were deemed high-risk terrorism targets. The $2.8 billion workers' compensation loss (in 2018 dollars) suffered during 9/11[7] could have been substantially higher had the timing of the attack been different and the World Trade Center was at full occupancy.

Scrutiny continues, and modeling of this exposure has become more sophisticated. For context, a study by the Rand Corporation[8] ahead of the 2014 TRIPRA expiration noted that workers' compensation losses from a large conventional attack—such as a 10-ton truck bomb—could exceed $10 billion, while losses from a nuclear attack would exceed $300 billion. And many workplaces remain soft targets that are increasingly vulnerable to the attack types that are on the rise globally.

As insurers begin to underwrite workers' compensation policies that contemplate coverage without the potential financial protections of TRIPRA, employers will likely face challenges. Most insurers will be less willing to underwrite the risks of employers in certain high-profile industries, with large employee concentrations, or in certain major cities. Thus, for as long as the uncertainty over TRIPRA continues, these employers are likely to see insurers offer shorter-term policies and higher workers' compensation rates and premiums.

Organizations with large concentrations of employees are the most likely to be affected. In addition to potential price increases, they also face the possibility that their insurers will decline to renew their coverage. The issue of employee aggregation affects any employer with a large number of employees in a single location or campus, as is common among financial institutions, hospitals, defense contractors, higher education institutions, hotels, professional services companies, and nuclear power companies.

[7] Insurance Informational Institute; All figures adjusted to 2018 dollars using U.S. Department of Labor BLS data.

[8] Rand. The Impact on Workers' Compensation Insurance Markets of Allowing the Terrorism Risk Insurance Act to Expire.

Additionally, insurers that write multiple lines of business, such as workers' compensation and property, consider the impact of potential terrorism losses across all correlated lines. Some insurers will decline certain risks outright because they are "over-lined" in a particular ZIP code or city, while others may impose a premium surcharge for a particularly large workers' compensation risk. Improved catastrophe modeling that can produce detailed worst-case scenarios—including some that generate losses so large that insurers would not write in the absence of TRIPRA—has increased underwriting scrutiny.

In light of the current uncertainty, insurers will evaluate their businesses, and some will limit their underwriting of workers' compensation for companies with high concentrations of employees in major cities. It is important to reiterate that because workers' compensation insurers cannot exclude terrorism-related losses and employers are almost always required to buy terrorism insurance, the options available to buyers will likely shrink and rates will likely increase. As long as the federal backstop provided by TRIPRA remains, capacity for workers' compensation terrorism catastrophe remains adequate to meet the increased demand of insurers that continue to purchase additional limits. However, if TRIPRA is allowed to expire or renewed with significant modifications, it is likely that a large number of these types of employers will be forced to obtain coverage from assigned risk or residual markets, which are considered insurers of last resort.

Impact of Program Uncertainty on the Economy

Insurers and rating agencies are closely monitoring legislative activity related to TRIPRA. Uncertainty, especially if no decision on the future of the federal backstop is made as the deadline looms closer, can impact the availability and nature of insurance coverage. That, in turn, could affect companies' decision-making processes about various corporate investments and projects, potentially sending ripple effects through the economy.

We are already seeing an impact on policies that extend beyond 2020, with some insurers either seemingly unwilling to offer terrorism coverage beyond the expiration of TRIPRA or seeking to increase prices to cover the additional risk to their portfolios. Without a decision to reauthorize or extend TRIPRA, we expect to see more sunset provisions in policies and higher costs as we get closer to December 31, 2020.

Allowing TRIPRA to expire or renewing it with significant increases in insurer participation will have an impact on terrorism-exposed insurers, particularly those with less than $500 million in capital reserves. We expect this to adversely affect pricing and limit the availability of terrorism risk coverage. If TRIPRA is allowed to expire and not replaced, those insurers that are still able to offer terrorism coverage will likely only write coverage for buyers with operations in preferred locations and could lead to increased prices for other locations. This would lead to capacity shortfalls for central business districts, at-risk industries, and employers with significant workers' compensation accumulations.

Thus, a federal backstop remains essential to the affordability and availability of terrorism coverage in higher-risk areas, including here in Washington and in New York, where I, and millions of other people, live and work.

As an alternative, businesses can consider standalone property terrorism insurance. But while it can complement TRIPRA coverage, offering broader coverage—for example, for non-certified acts of terrorism—its pricing, along with the constraint of limited available aggregate for certain risks, prevent it from serving as a replacement for TRIPRA for many organizations.

It is also important to underline that cyber-attacks remain an ever-present and escalating threat over which businesses have little control. While organizations can take steps to strengthen their cyber resilience, including thorough scenario-based testing and quantifying the potential financial impact of an attack, it remains essential that they transfer the financial risk from cyber-attacks via insurance. With TRIPRA serving as a critical federal backstop for covered cyber-terrorism losses, cyber insurance policies have, over time, evolved to respond to the failure of technology and the resulting interruption or loss of revenue in addition to traditionally important privacy risks.

Despite available insurance capital, in the absence of TRIPRA's mandatory "make available" provision, insurers might not offer terrorism coverage, and there is a real risk that many property and casualty insurers will decide not to underwrite terrorism risks.

Conclusion

In Marsh's view, TRIPRA is a model of public-private partnership and remains instrumental in providing a reinsurance backstop for insurers, which allows them to provide sufficient limits of terrorism coverage to the business community. TRIPRA affords the private insurance market the ability to provide affordable capacity even to areas perceived as high-risk. It has been essential and effective in making terrorism insurance available and commercially viable in the US.

As methods used to perpetrate acts of terrorism continue to shift, so do the at-risk areas. We can no longer focus on larger cities, but need to ensure the appropriate coverage is readily available across the country. This includes protection against NBCR attacks, which are not typically covered by reinsurance programs despite the potentially devastating human and economic losses they could generate.

According to the Reinsurance Association of America,[9] the federal share of a $100 billion ground-up loss subject to TRIPRA would be 51%, with the private market covering the remaining 49%. If TRIPRA is reauthorized next year, the federal share will continue to decline over the years as the marketplace aggregate deductible rises with premium growth.

[9] Reinsurance Association of America.

We are concerned that TRIPRA's expiration, or renewal with significant increases in retentions, would lead to capacity shortfalls, with high-profile businesses, top business districts, and larger employers—including universities, hospitals, and hospitality companies—most affected.

The expiration of TRIPRA without an apt replacement would also adversely affect workers' compensation policies and potentially have a negative ripple effect on the economy. AM Best has already warned that the expiration of TRIPRA without a suitable replacement could lead to rating downgrades for property and casualty insurers that are not able to provide sufficient action plans to reduce their exposures to terrorism risks in the absence of a federal backstop.[10]

We believe that a seamless renewal process and robust reauthorization bill can help keep the terrorism insurance market viable and competitive for buyers in the US. We encourage decisions to be made with a full understanding of shifts in the nature of terrorism and how they can affect organizations and insurers.

With just over 18 months before TRIPRA's expiration, time is of the essence. If modifications to TRIPRA are to be considered, it is imperative for the industry to have ample time to prepare for and implement the changes.

[10] Best's Commentary. TRIPRA Expiration Raises Potential for Rating Downgrades for P/C Insurers. May 10, 2019.

Appendix A

MARSH

INSIGHTS | MAY 2019

2019 Terrorism Risk Insurance Report

INSIGHTS | MAY 2019

2019 Terrorism Risk Insurance Report

CONTENTS

Introduction

Terrorism remains a dynamic global risk and a serious threat for people and organizations. The evolution of terrorism risk exposes many countries to complex threats from both international and home-grown groups, as well as individuals acting on their own, known as "lone wolves."

Ebbs and flows in terrorism are common, but the evolving and ever-present nature of this risk requires people and organizations to be continuously on guard.

The means and perpetrators of terrorist attacks continue to shift, with soft or relatively unprotected targets becoming more of a focal point. In response, insurers are continuing to develop and offer new and innovative solutions for risk professionals, who have been challenged to adopt new strategies to protect properties, employees, and balance sheets in response to constantly evolving threats. The market for property terrorism insurance remains competitive for most buyers, due in recent years to a steady decline in the number of global terrorist incidents and minimal insurance claims.

In the US, attention will soon turn to Congress as the Terrorism Risk Insurance Program Reauthorization Act (TRIPRA) approaches expiration at the end of 2020. TRIPRA, as with similar public-private mechanisms in other countries, has played an important role in ensuring the continued stability and health of the property terrorism insurance market, and Marsh will continue to monitor developments regarding its renewal.

Our *Terrorism Risk Insurance Report* explores the state of terrorism and the terrorism insurance marketplace in key regions. In this year's report, you will find insurance market insights and data and rankings from Marsh's *World Risk Review* ratings system.

We hope you find this report to be useful as you take steps to manage your terrorism risk.

The means and perpetrators of terrorist attacks continue to shift, with soft or relatively unprotected targets becoming a focal point.

WORLD RISK REVIEW

World Risk Review is Marsh's proprietary country risk rating platform, providing risk ratings across nine different perils for 197 countries. Ratings are generated by an algorithm-based modeling system that incorporates more than 200 international indices.

The terrorism risk rating is generated using a number of individually weighted indicators, and assesses the risk of the use of force or violence by one or more persons or any organization, the object of which includes the intimidation or coercion of a government and/or the civil population for political, religious, or ideological purposes.

Overall Terrorism Risk Remains Complex

Despite Declining Trendline, Riskiest States See Little Improvement

Between May 2018 and May 2019, *World Risk Review* ratings reveal a trend toward decreasing terrorism risks.

In that period, risk ratings fell in 116 countries, while increasing in only 34. Rating scores fell in many countries as security services redoubled their efforts to tackle international terrorist groups in the Middle East, Europe, and Sub-Saharan Africa.

FIGURE 1 Little change in the countries at highest risk from May 2018 to May 2019.

SOURCE: WORLD RISK REVIEW

Terrorism

May 2018	May 2019
1. Afghanistan	1. Afghanistan
2. Yemen	2. Syrian Arab Republic
3. Iraq	3. Libya
4. Syrian Arab Republic	4. Yemen
5. Somalia	5. Iraq

Strikes, riots, and civil commotion

May 2018	May 2019
1. Venezuela	1. Venezuela
2. Yemen	2. Yemen
3. South Africa	3. South Africa
4. Bangladesh	4. Zimbabwe
5. Bolivia	5. Iraq

War and civil war

May 2018	May 2019
1. Syrian Arab Republic	1. Syrian Arab Republic
2. Afghanistan	2. Afghanistan
3. South Sudan	3. Yemen
4. Yemen	4. Libya
5. Libya	5. South Sudan

Terrorism risks fell notably in Egypt, Turkey, and Spain between May 2018 and May 2019. However, there has been little improvement in the world's riskiest states for terrorism. In May 2018, Afghanistan, Yemen, and Iraq held the top three highest terrorism risk ratings. A year later, Afghanistan retained its position, followed by Syria, then Libya (see Figure 1).

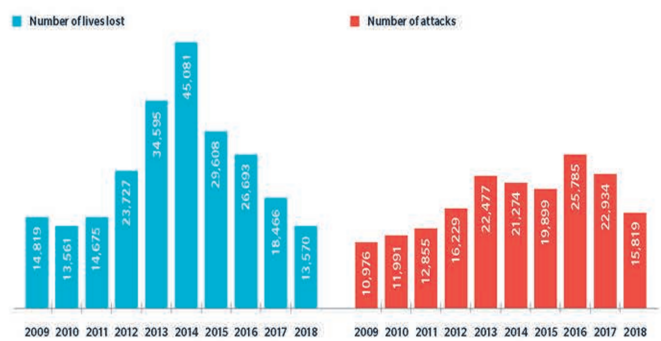
Despite a trend of decreasing risk, the dynamic nature of terrorism all but ensures that new threats will arise in the coming years. In 2018, a number of key trends emerged that will likely affect terrorism risks in 2019. First, Islamic State (IS) suffered a near-total collapse. By March 2019, the self-described "caliphate" no longer controlled territory; at its peak, the group held territory the size of Portugal. Abu Bakr al-Baghdadi, the group's leader, reappeared in April via video after a five-year absence.

The territorial defeat of IS will likely bring new threats both in the Middle East and in Western states. In Iraq and Syria, IS is expected to revert to insurgent-style attacks. European governments will continue to grapple with the legal and security challenges presented by returning fighters.

Although terrorists and other non-state actors globally have killed more than 230,000 people over the last decade, the number of people killed in terrorist incidents fell by more than one-quarter and the number of attacks fell by nearly one-third in 2018, according to Jane's Terrorism and Insurgency Centre by IHS Markit (see Figure 2). But as attacks by lone wolves and small groups become more commonplace — including against soft targets, which are not limited to major metropolitan areas — the threat of terrorist incidents occurring in or near workplaces has become a growing concern for employers.

FIGURE 2 The number of lives lost to acts of terrorism, insurgency, and politically or ideologically motivated violence fell again in 2018.

SOURCE: JANE'S TERRORISM AND INSURGENCY CENTRE BY IHS MARKIT



While religious extremism is expected to remain the dominant terrorism threat globally, the threat from the extreme right-wing (ERW) is deepening in Western states. Boosted by the success of far-right political parties, there has been a growing trend of attacks by lone perpetrators inspired by far-right ideology. Security services face a difficult task in disrupting plots, given the absence of a unifying ERW structure and the unlikelihood of perpetrators being directed by an organized group. ERW attacks may mirror the methodology used successfully by extremists since 2014. Low-capability attacks using firearms, bladed weapons, or vehicles are likely to be favored, entrenching a shift toward attacks that generate little property damage, but pose significant risks to people.

Moreover, the financial and reputational impacts of terrorist attacks remain sizeable. Organizations operating internationally, and their employees, are often priority targets for terrorists.

The Institute for Economics and Peace estimates that the average annual economic impact of terrorism was $83 billion between 2013 and 2017 (see Figure 3). Organizations should continue to implement adequate risk and crisis management strategies to protect their people and balance sheets from the persistent threat of terrorism.

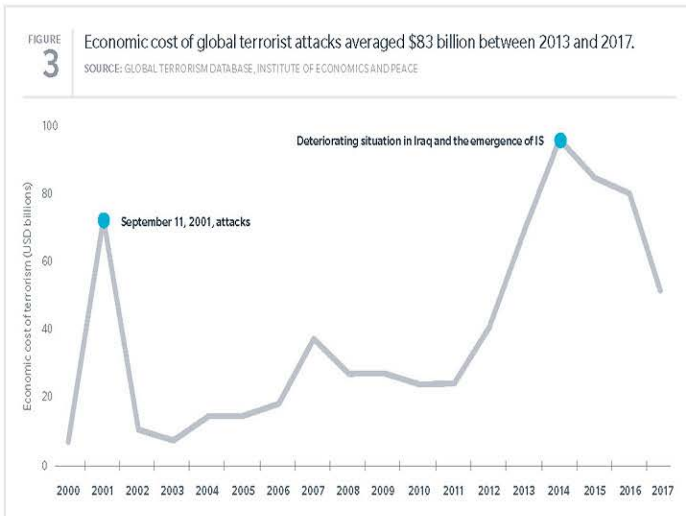


FIGURE 3
Economic cost of global terrorist attacks averaged $83 billion between 2013 and 2017.
SOURCE: GLOBAL TERRORISM DATABASE, INSTITUTE OF ECONOMICS AND PEACE
Deteriorating situation in Iraq and the emergence of IS
September 11, 2001, attacks
Economic cost of terrorism (USD billions)
100
80
60
40
20
0
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017

IN FOCUS

US Terrorism Risk Backstop up for Renewal in 2020

The last several years have been characterized by a decline in both the frequency and severity of terrorist incidents in the US. There have been no certified terrorism losses in the country since the Terrorism Risk Insurance Act (TRIA) was originally passed following the attacks of September 11, 2001. Nevertheless, the federal backstop created by TRIA and reauthorized as TRIPRA — along with similar public-private mechanisms that exist in other countries — remains crucial to the continued stability and health of the property terrorism insurance market.

As TRIPRA's expiration on December 31, 2020, approaches, Marsh & McLennan Companies (MMC) colleagues have spoken with Treasury department officials and legislators in both chambers of Congress, who generally recognize TRIPRA's importance and appear optimistic about its extension. In the coming months, policymakers will continue to consider their options and the potential effect that program changes could have on the marketplace.

MMC will continue to advocate for a robust reauthorization bill to help keep the terrorism insurance market viable and competitive for US buyers.

Meanwhile, we expect that insurers will closely monitor legislative activity. If it appears likely that the backstop will not be in place beyond 2020, they may impose sunset clauses in upcoming renewals for policies that would be in effect beyond December 31, 2020. Some insurers may also increase prices or limit deployed capacity as they reassess their exposure to terrorism.

TRIPRA'S IMPACT ON THE REINSURANCE MARKET

Reinsurance capacity for terrorism can differ by reinsurers' preference, appetite, and expertise. For conventional terrorism, reinsurers can deploy multiple aggregates to individual attack types. However, the potential exposure from nuclear, biological, chemical, and radiological (NBCR) events is much larger and likely a "net loss" to reinsurers since retrocessional facilities do not typically cover NBCR. Due to uncertainty around TRIPRA's future, insurers and terrorism insurance buyers are selectively seeking additional reinsurance limits and coverages, under the assumption that there is a finite amount of capacity available in the private market, especially for NBCR events.

If TRIPRA is allowed to expire or is renewed with significant cedent net retention increases, terrorism-exposed insurers with less than $300 million in surplus will likely need to purchase additional private reinsurance market capacity to help protect capital and satisfy rating agencies and regulators. Multiple carriers accessing the reinsurance market capacity simultaneously will impact pricing.

Should TRIPRA expire without a replacement, insurers with the ability to do so will likely deploy terrorism capacity only for preferred locations and pricing. Reinsurers are also likely to only provide additional capacity at notably higher rates, which could create capacity shortfalls for some central business districts and employers with significant workers' compensation accumulations. As such, a federal backstop remains essential if the private reinsurance market is to continue to provide capacity to higher-risk areas.

"The federal backstop created by TRIA remains crucial to the continued stability of the property terrorism insurance market."

Global Terrorism Insurance Market Trends

Insurance Markets Adapt to Meet Global Business Needs

Terrorism cover was originally designed to respond to property losses from terrorism caused by large explosive devices. However, attack methodologies have shifted in recent years.

Today, the predominant threat globally is from Islamist extremists focused on inflicting mass casualties in low-capability attacks on crowded public spaces. Modern attacks are often less sophisticated, with assailants deploying bladed weapons, firearms, and/or vehicles.

This new attack methodology generally generates relatively little property damage. In fact, two-thirds of terrorist attacks in Western Europe between 2014 and 2018 did not generate any property damage, according to Pool Re. Still, multiple businesses suffered significant revenue losses as a result of various attacks.

For example, in the wake of the 2017 London Bridge attack, extensive police cordons remained for 10 days, generating widespread business interruption losses. Since there was limited physical damage, many insureds were left without cover. Businesses lost an estimated £1.4 million from the London Bridge attack, according to Pool Re.

Beyond direct business interruption losses, many businesses in or near areas struck by terrorism often see a decline in foot traffic well after cordons are cleared. The tourism and retail sectors are particularly at risk for losses following terrorist attacks.

These trends, coupled with the proliferation of incidents that are not clearly described as acts of terrorism, such as mass shootings in schools, churches, private businesses, and public settings, have prompted insurers to innovate amid demand from buyers. Specifically, insurers have focused on developing:

- **Active assailant coverage,** also known as active shooter, malicious attack, or deadly weapons coverage — which typically offers affirmative coverage that is triggered by premediated malicious physical attacks by active assailants who are physically present and armed. Such policies can offer coverage for property damage, business interruption, and extra expenses; legal liability; loss of business and denial of access; and the costs of public relations consulting, crisis management, medical services, counseling and/or psychiatric care, the hiring of additional staff, and added security.
- **Non-damage business interruption (NDBI) coverage,** which can respond to the loss of revenue even without a physical damage coverage trigger. NDBI policies are evolving to respond regardless of whether an event is officially classified as a terrorist attack. This coverage is tied to a predetermined vicinity of an insured location, which can vary from policy to policy.

Standalone Market Offers Flexible and Dependable Coverage

Standalone property terrorism insurance is available as an alternative or complement to TRIPRA coverage. Pricing for the standalone market is typically not affected by natural catastrophe events and is expected to remain competitive in 2019, barring a material change in market conditions.

Unlike TRIPRA coverage, which is available within annual "all-risk" property policies for US locations, a standalone property terrorism insurance policy does not require the government to certify an act of terrorism in order for a claim to be paid.

Standalone policies offer broad terms and conditions that can include:

- A definition of "act of terrorism" as the use of force or violence — of any person or group, whether acting alone or on behalf of or in connection with any organization — for political, religious, or ideological purposes, including the intention to influence any government and/or to put the public in fear for such purposes.
- Consistent wording globally.
- Tailored coverage for selected locations, coverage outside of the US, and political violence coverage.
- Multiyear policy terms.
- Nuclear, biological, chemical, and radioactive (NBCR) coverage, although this may be limited in scope and costly.
- Non-damage business interruption coverage.
- Property damage as a result of a cyber-attack.

Although available standalone capacity currently has a theoretical maximum of approximately $4.3 billion, locations in the central business districts of Tier 1 cities, which are perceived as at higher risk for terrorism, can present accumulation concerns for insurers. Any uncertainty about the future of TRIPRA could depress capacity in Tier 1 cities as companies lock in the coverage certainty on a first-come, first-served basis.

Political Violence Coverage can Supplement Terrorism Insurance

While terrorism insurance can cover physical damage and business interruption resulting from acts that are motivated by politics, religion, or ideology, multinational businesses may also wish to consider purchasing political violence (PV) coverage. In addition to terrorism, PV policies can provide coverage related to war, civil war, rebellion, insurrection, coup d'état, and other civil disturbances.

Because PV policies are designed to respond to the perceived risk within the territories in which a business operates, purchasing such coverage can help avoid disputes about whether an event was an act of terrorism or political violence.

Purchasing terrorism and/or PV coverage alone, however, can leave some buyers with gaps in coverage, as potential risks can extend beyond the threat of violence. Broader political risk insurance policies can include PV coverage while also responding to a range of other perils related to government actions and instability, including expropriation of assets, forced abandonment, currency inconvertibility, and nonpayment and contract frustration.

TIER 1 CITIES

1. London
2. New York
3. Chicago
4. San Francisco
5. Washington
6. Toronto
7. Montreal
8. Calgary
9. Frankfurt
10. Singapore
11. Bangkok

60%

Terrorism insurance take-up rates have remained close to 60% in the US over the last several years.

US Organizations Continue to Purchase Terrorism Insurance at High Levels

Overall Purchasing Rates Steady

The US is the world's largest buyer of terrorism insurance, and US-based organizations continue to purchase coverage at a high rate. In 2018, the take-up rate for TRIPRA coverage embedded in US property policies was 62% (see Figure 4). Take-up rates have remained close to 60% over the last several years.

FIGURE 4 Overall US terrorism insurance take-up rates remain near 60%.

SOURCE: MARSH PLACEMAP

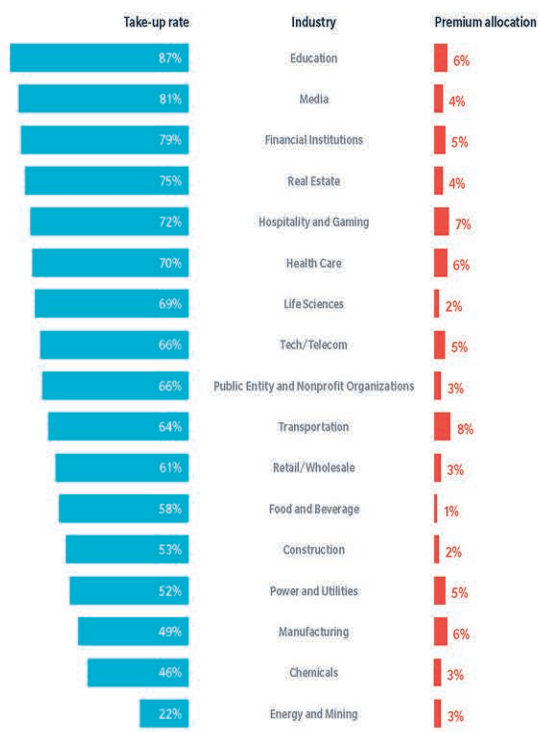
Industry Approaches Vary

The percentage of companies that purchased terrorism insurance — and the amount they spent on terrorism insurance as a portion of their overall premiums — varied significantly by industry in 2018. Education institutions, media organizations, financial institutions, and real estate companies were the most frequent buyers while transportation and hospitality and gaming companies spent the most on terrorism as a percentage of their total premium spend due to their perceived vulnerability (see Figure 5).

FIGURE 5

Education entities bought terrorism insurance most frequently in 2018; transportation companies allocated the largest share of overall premium.

SOURCE: MARSH PLACEMAP



Lower Costs for Larger Companies

With insurers suffering few significant losses in recent years — most of which occurred outside of the US — and both new entrants and incumbents committing to underwriting terrorism risk, overall property terrorism insurance capacity remains abundant. Consistent with previous years, property terrorism insurance rates in 2018 were typically lower for larger companies (see Figure 6). In 2018, the cost of terrorism insurance as a percentage of overall property premiums was highest for companies with total insured values (TIV) of $1 billion or more (see Figure 7).

FIGURE 6 2018 median terrorism insurance pricing per million was generally lower for larger companies.

SOURCE: MARSH PLACEMAP

FIGURE 7 Larger companies generally allocated more of their property premium to terrorism in 2018.

SOURCE: MARSH PLACEMAP

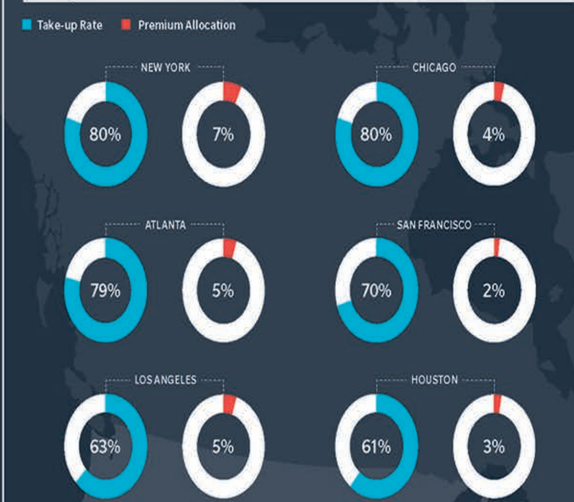
Take-Up Rates Highest in Major Metropolitan Areas

Companies based in the Northeast United States have traditionally purchased property terrorism insurance at a higher rate than companies based in other regions. Unsurprisingly, 80% of companies based in New York purchased terrorism insurance in 2018, tying it with Chicago for the lead among major US cities that are perceived as higher-value targets for terrorist acts (see Figure 8).

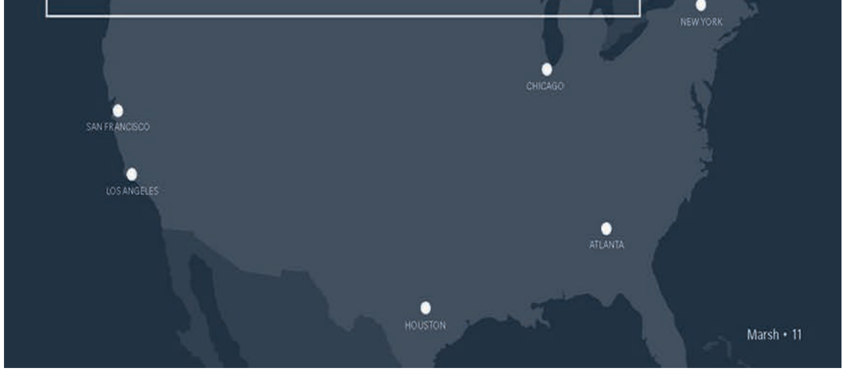
New York-based companies also spent the most on terrorism insurance as a percentage of total premiums. Companies based in Los Angeles and Houston purchased terrorism insurance at the lowest rate within this group, but the price per million for terrorism insurance was highest for Houston-based companies — exceeding even New York-based companies — in part because of high overall property insurance premiums paid by energy companies, many of which are headquartered in Houston.

FIGURE 8 New York City-based companies were the most frequent buyers of terrorism insurance.

SOURCE: MARSH PLACEMAP



* Based on company's headquarters location



PLANNING EXERCISES REMAIN CRUCIAL

Although insurance can provide essential protection in the event of a terrorist attack, it's vital that businesses also develop, maintain, and exercise corporate and site-level crisis management plans.

Organizations should develop and test an overall framework and crisis management team structure for management, response, and recovery at the senior executive level. Following a terrorism incident, organizations should be prepared to ensure the safety of employees and provide them with support as needed, protect physical assets, and stay in contact with employees and their families, customers, investors, and other stakeholders.

Once life safety issues have been addressed, organizations should look to keep operations —including critical technologies —running smoothly. Among other actions, businesses should develop and test business continuity plans, coordinate insurance coverage, and prepare to gather appropriate information to support a claim. Risk models and other analytic tools can help organizations assess the potential magnitude of terrorism events and optimize insurance programs and other risk financing strategies.

Captives Continue to Write Terrorism Risk

In 2018, 182 Marsh-managed captives accessed TRIPRA to write property, workers' compensation, general liability, and cyber risk for their parent companies. Captive owners have often found that the total cost of implementing terrorism insurance programs compares favorably to the cost of buying from commercial insurers. Captive insurers can generally offer broader coverage than commercial insurance policies, which often restrict coverage for:

- NBCR events.
- Contingent time-element losses.
- Cyber terrorism.

Managing Risks to Workers

As attacks by lone wolves and small groups remain a significant threat, employers are increasingly concerned about terrorist incidents occurring in or near their workplaces.

UNITED STATES

Work-related injuries and deaths are covered under workers' compensation systems in US states. Workers' compensation insurance policies cannot exclude terrorism-related losses and are a compulsory purchase for employers in nearly all states. Still, insurers carefully manage their overall portfolios and consider large employee concentration exposures and the associated loss potential, which means that data quality in underwriting submissions can significantly affect how insurers evaluate and price an organization's workers' compensation terrorism risk.

Robust and complete data can also enable insurers to understand employers' risk profiles in the context of their overall workers' compensation book and correlating risks, including property, personal lines, and life insurance.

Simple payroll data by location, however, is unlikely to suffice; instead, employers should be prepared to share with underwriters:

- Detailed address information, including ZIP codes.
- Employee locations on campuses.
- The number of shifts per location and employees assigned to each.
- The number of telecommuters that an organization employs.
- Details from swipe cards showing the actual or maximum number of employees present at each location or building on a given day.

OUTSIDE OF THE US

Globally, employers are often legally required to secure workers' compensation for some or all employees. In many countries, it is provided through government programs; in others, employers must secure it.

Workers' compensation policies issued to the parent company or "local" operations in other countries alone, however, may not address exposures associated with multinational enterprises and a transient workforce. To expedite workers' recovery and to protect companies from lawsuits, employers may also purchase discretionary coverages. These include:

- Employers liability coverage, which defends and indemnifies employers from lawsuits brought by workers for injuries arising out of the course of their employment within the policy territory. Similar to foreign voluntary workers' compensation (FVWC), it is provided in the US as part of workers' compensation insurance. Outside of the US, the coverage may be found as an endorsement on local workers' compensation or general liability policies or purchased on a standalone basis.

Coverage under employers liability is customarily included in umbrella or excess liability policies.

- Personal accident insurance coverage, which can supplement local workers' compensation benefits or act as an employee benefit program.

The provision of compensation for medical care and lost wages for terrorism-related injuries will depend on the system in place in the worker's country of hire and/or work. Expatriate workers present a unique situation; when and where specific programs will apply to an expat will depend on:

- The employee's nationality (country of origin).
- Where payroll is reported (country of hire).
- The length of the employee's work assignment.

Coverage for injuries and illnesses due to acts of war or terrorism may differ depending on which insurance policies are in place, which are triggered and, for workers' compensation, whether the law extends coverage to such events. For compulsory workers' compensation coverage, terrorism is typically provided due to the broad extent of coverage under the law or by specific laws. In some countries, however, government-provided benefits are broad and may not distinguish the cause of injury or illness in determining eligibility.

For discretionary insurance, such as FVWC, employers liability, and personal accident policies, terrorism coverage is typically not required and may be excluded by default. Coverage for terrorism can typically be added by endorsement, usually for an additional premium. However, terrorism is generally not excluded for FVWC policies placed in the US. Multinationals based in the US should review their general liability controlled master programs and other umbrella or excess liability policies for coverage.

As part of an effective terrorism risk management program, employers should consider local insurance regulations along with the size, concentration, and significance of their workplace injury exposure in the countries in which they operate.

Global Terrorism Trends

World Risk Review Ratings Showed an Overall Trend Toward Decreasing Terrorism Risks, Though Country Results Vary

FIGURE 9

Mozambique saw largest year-over-year increase in terrorism risk as measured by *World Risk Review* score.

SOURCE: WORLD RISK REVIEW

Country	Score change	Actual score (May 2019)
Mozambique	2.1	6.4
Iran	0.7	5.8
Chad	0.7	7.1
Venezuela	0.6	4.9
Tajikistan	0.6	5.1

FIGURE 10

South Sudan saw the largest year-over-year decrease in terrorism risk as measured by *World Risk Review* score.

SOURCE: WORLD RISK REVIEW

Country	Score change	Actual score (May 2019)
South Sudan	-1.3	7.0
China	-1.2	2.9
Egypt	-1.1	7.0
Spain	-1.0	3.5
United Kingdom	-0.9	4.3

World Risk Review ratings are based on modeling more than 200 international indices. The terrorism risk rating, or score, for each country is generated using a number of individually weighted indicators. Among the trends identified over the last 12 months through the terrorism score modeling:

MOZAMBIQUE SCORE 6.4 | INCREASE 2.1

Mozambique faces an emergent terrorism risk in its northern Cabo Delgado province. Between October 2017 and December 2018, at least 20 attacks and 57 non-militant deaths were recorded. In February 2019, militants used small arms to attack convoys transporting employees to a liquefied natural gas (LNG) project. One contractor was killed, in what was the first attack to directly target assets or personnel in the LNG sector.

CHAD SCORE 7.1 | INCREASE 0.7

Chad faces increased activity by insurgents in the north. Libya-based militants from the Union des Forces de la Résistance (UFR) have staged incursions into Chadian territory, which security forces have struggled to contain. In February 2019, President Idriss Déby requested air support from France's Barkhane counterterrorism operation to tackle an incursion.

TURKEY SCORE 6.6 | DECREASE 0.5

Terrorism risks in Turkey receded in 2018. The government effectively used unmanned aerial vehicles to counter the threat posed by the Partiya Karkerên Kurdistanê (PKK) in the southeast. IS's capacity to organize attacks has similarly reduced. IS has not launched a successful attack in Turkey since January 2017.

SPAIN SCORE 3.5 | DECREASE 1.0

In May 2018, Basque separatist group Euskadi Ta Askatasuna (ETA) officially disbanded, significantly reducing the threat of separatist terrorism in Spain. However, Islamist extremists continue to organize in Spain, generating a persistent risk of attacks targeting crowded public spaces with small arms or bladed weapons. The 2017 Barcelona and Cambrils attacks, in which 15 people died, also revealed the existence of a cell with bomb-making capabilities.

EGYPT SCORE 7.0 | DECREASE 1.1

The government launched a counterterrorism campaign in February 2018 that successfully reduced the frequency of IS attacks to the west of the Suez Canal. However, IS retains capabilities in Sinai and is likely to launch effective attacks against religious minorities and security forces. Tourist resorts in Sinai will likely be aspirational targets, although the risk can be mitigated by adequate security measures.

UNITED KINGDOM SCORE 4.3 | DECREASE 0.9

The frequency of terrorist attacks decreased in 2018, as IS's influence and authority eroded in the Middle East. The number of terrorist attacks in 2018 was far below that of 2017, when 36 people lost their lives across 107 foiled and completed attacks. The UK increasingly faces risks posed by returning fighters, while the extreme right wing is emerging as a growing risk.

"There have been more arrests and deaths [in the US] caused by domestic terrorists than international terrorists in recent years."

MICHAEL C. MCGARRITY
ASSISTANT DIRECTOR,
COUNTERTERRORISM DIVISION,
FBI

North America

The US continues to be a high-risk target for terrorism. Soft targets such as transport systems and public events will be at the highest risk of attack. The threat level in Mexico and Canada is greatly reduced, though the risk of lone wolf attacks in Canada remains.

Terrorism in the US is more likely to be carried out by lone wolves and small groups inspired by, but not directly affiliated with, international terrorist organizations. However, the threat from the ERW continues to increase. Across both far-right and Islamist extremist attacks, the availability of firearms in the US will likely make active shooter incidents a continuing threat (see Figure 11). Mass shootings such as those at an Orlando nightclub in 2016 and a music festival in Las Vegas in 2017 have increased interest in insurance coverage relating to active shooter threats.

Terrorism risks in Canada have been greatly reduced over the last five years, though the threat from Islamist extremists and the ERW still present a danger. In Mexico, Islamist terror organizations have little presence, and the threat level to both businesses and individuals is minimal.

KEY TERRORIST ACTORS IN 2019

- Islamist terrorism: lone wolf or small terrorist cells
- Extreme right-wing: individuals or groups

Which Sectors Are Most Exposed?

Commercial Businesses

Businesses in densely populated urban areas, such as New York and Toronto, may look to non-damage denial of access and non-damage loss of attraction cover to mitigate low-capability attacks on public areas (see Figure 12). For example, in April 2018, an attack using a vehicle in Toronto's North York City Centre killed 10 pedestrians and injured 16 others. The incident forced a rerouting of public transport services away from the central business district and the police cordon closed access routes for a number of businesses for up to 48 hours.

Transport

Transport infrastructure poses a target for terrorists across North America, exemplified by the detonation of a pipe bomb in a New York subway station by an Islamist extremist in 2017 that injured four people. Mail bomb packages have unsuccessfully targeted densely populated subway stations in Toronto over the last two years, including an incident in March 2019.

FIGURE 11

Firearms were the most commonly used weapon in terrorist attacks in North America from 2014 to 2018.

SOURCE: POOL RE

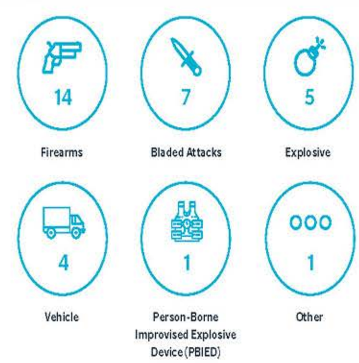


FIGURE 12

Potential targets in North America from 2014 to 2018 included public areas and police and military installations.

SOURCE: POOL RE

9.6%

Of global attacks on critical national infrastructure between 2014 and 2018, nearly 10% occurred in Latin America.

SOURCE: POOL RE

Latin America and the Caribbean

While domestic terrorism risks from left-wing insurgent groups have generally fallen across Latin America in recent years, energy sector assets remain attractive targets in Colombia. The risk from international terrorism is currently low in Latin America and the Caribbean.

Terrorist activity by left-wing insurgent groups is likely to recede in 2019, continuing a decade-long trend. The 2016 Colombian peace agreement ended decades of conflict between the Fuerzas Armadas Revolucionarias de Colombia (FARC) and the Colombian government. Left-wing guerrilla groups, such as Sendero Luminoso in Peru, have also lost much of their ideological appeal as living standards have improved.

However, the risk of domestic terrorism has not disappeared. Pockets of FARC dissidence remain in Colombia, while the Ejército de Liberación Nacional (ELN) has both the capability and intent to carry out attacks on oil and mining operations. Oil pipelines and contractors in eastern and western Colombia face high risks of attack, kidnap, and assassination by ELN insurgents.

KEY TERRORIST ACTORS IN 2019

- Sendero Luminoso (Peru)
- Dissident rebels from the Fuerzas Armadas Revolutionarias de Colombia (FARC)
- Ejército de Liberación Nacional (Colombia)

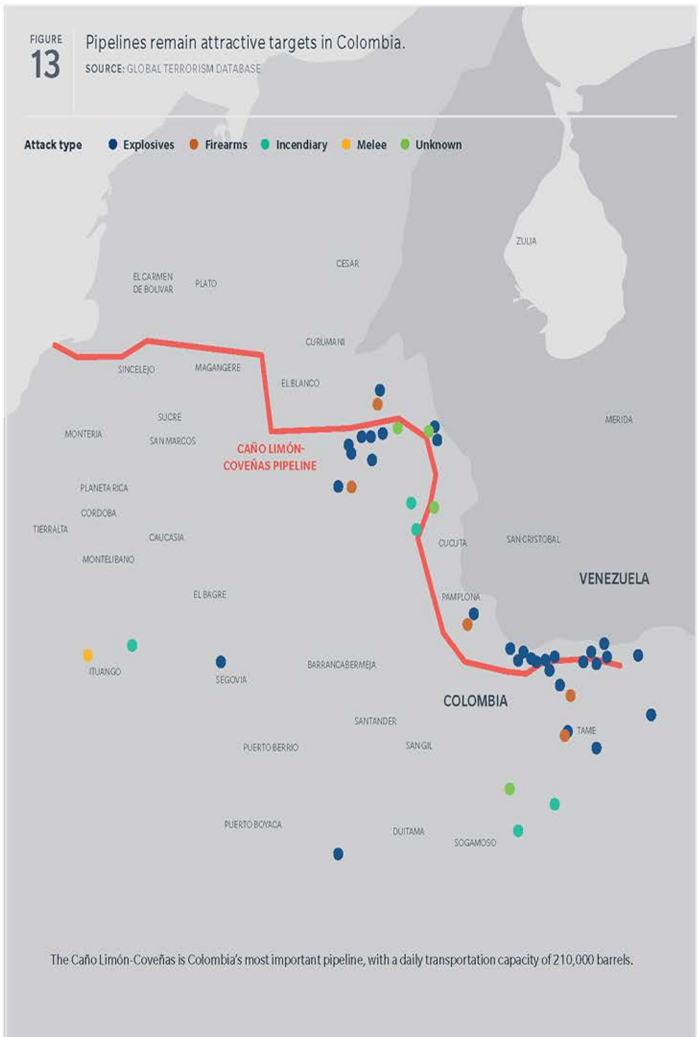
Which Sectors Are Most Exposed?

Energy and Mining

In Colombia, the ELN is active in regions with mining and energy activities, such as Arauca, Nariño, and Norte de Santander. The group is likely to use improvised explosive devices (IEDs) to target pipelines. Authorities have recorded at least nine attacks against the Caño Limón-Coveñas oil pipeline — Colombia's most important pipeline, with a daily transportation capacity of 210,000 barrels — in 2019, including six in Arauca and three in Norte de Santander provinces (see Figure 13). Throughout 2018, at least 89 attacks against pipelines were reported in Colombia.

FIGURE 13 Pipelines remain attractive targets in Colombia.

SOURCE: GLOBAL TERRORISM DATABASE



The Caño Limón-Coveñas is Colombia's most important pipeline, with a daily transportation capacity of 210,000 barrels.

€180bn

The approximate total losses incurred in real GDP terms by the 28 EU member states due to terrorist events, from 2004 to 2016.

SOURCE: RAND

Europe

The threat of Islamist extremism remains high in Europe, driven in part by radicalized individuals returning from fighting in Iraq and Syria. Religious extremist attacks in the EU will likely target the entertainment and hospitality sectors and public spaces frequented by tourists.

Although the frequency of attacks has fallen since 2017, extremists have been most active in France, Spain, and the UK, with vehicles, firearms, and knives the most prevalent weapons. Right-wing extremism is on the rise and likely to gain ground in 2019 (see Figure 14), which will elevate operational risks for businesses and individuals. In the UK, the assassination of Member of Parliament Jo Cox in 2016 and an attack on a north London mosque in 2017 by right-wing extremists are evidence of an elevated threat. The absence of a single organizational structure makes it harder for security forces to detect ERW activity.

KEY TERRORIST ACTORS IN 2019

- Islamist terrorism: lone wolf or small terrorist cells
- Extreme right-wing groups
- Dissident republican terrorist groups (Northern Ireland)

Which Sectors Are Most Exposed?

Transport

Public transport systems and hubs have often been deemed soft targets for terrorist activity in Europe. In the last four years, indiscriminate, low-capability terrorist attacks have been carried out on commuter trains in France, Germany, and the Netherlands.

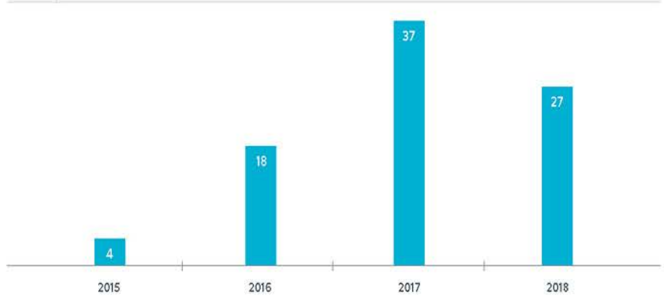
Retail and Hospitality

These sectors may not be direct targets of terrorism, but the impact related to a potential blast radius poses risks. Significant business interruption is possible during and after attacks that cause limited property damage, as police may enforce cordons over multiple days. Public markets have been the subject of terrorist attacks in Germany and France over the last three years.

FIGURE 14

Counterterrorism operations against right-wing extremists in Western Europe sharply increased in 2017 and 2018.

SOURCE: IHS MARKIT



901

Terrorist attacks across SSA from 2014 to 2018.

57.4%

Attacks that caused property damage.

8,592

Number of deaths.

JUNE 2014 TO JUNE 2018
SOURCE: POOL RE

Sub-Saharan Africa

Islamist extremism remains potent in Sub-Saharan Africa (SSA), with West Africa and the Sahel particularly affected.

The last three years have seen a significant decline in total terrorism-related deaths per year in SSA, mainly due to the decrease in activity of Nigeria-based Boko Haram. The G5 Sahel security alliance has reclaimed significant territory from Boko Haram, but the group retains influence throughout the Lake Chad basin.

Porous borders in West Africa and the Sahel continue to hamper regional efforts to combat terrorism threats, as terrorist groups seek to destabilize the entire region. Loss of territory in the Middle East will also drive a pivot towards SSA by IS and al-Qaida. There is a strong likelihood of organizations such as al-Qaida in the Islamic Maghreb (AQIM) pooling resources with splinter groups and militias, particularly in Somalia, Niger, Mauritania, Burkina Faso, and northern Mali. This means that individuals and businesses remain exposed to attacks, including IEDs, shootings, and kidnappings. Al-Qaida-affiliated Jamaat Nusrat al-Islam wal Muslimin (JNIM) remains a significant threat across the Sahel. The group is shifting its target set to national and international government assets, away from soft targets. French companies will likely remain particularly exposed across the region.

KEY TERRORIST ACTORS IN 2019

Al-Qaida in Islamic Maghreb (AQIM)	Al-Shabaab
Boko Haram	Jamaat Nusrat al-Islam wal Muslimin (JNIM)
Ansar al Islam	Islamic State in the Greater Sahara (ISGS)

Which Sectors Are Most Exposed?

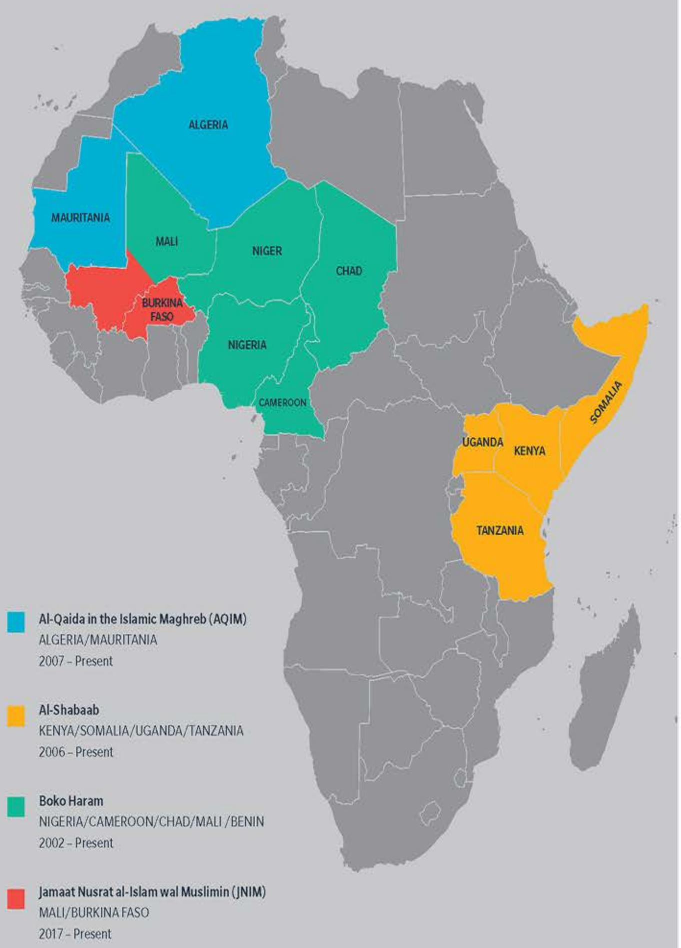
Mining

Islamist extremism is a risk to firms operating in Burkina Faso, Côte d'Ivoire, Mali, and Nigeria. Mali accounts for 75% of all terrorist incidents across the Sahel region since 2015. While mines in southwest Mali are relatively sheltered from direct attacks, porous land borders contribute to an underlying risk. Mali-based militants are also active in Burkina Faso, where mining sector employees have become a principal target for kidnappings.

Retail and Hospitality

Soft targets such as hotels, shopping malls, and restaurants remain attractive targets for terrorist actors across SSA, given the concentration of foreign nationals in these locations. Attacks are likely to include the use of IEDs and firearms. Recent major incidents include attacks on a shopping complex in Nairobi, Kenya, in 2013; a hotel in Bamako, Mali, in 2015; and a complex in Nairobi, Kenya, in 2019.

FIGURE 15 Islamist militant groups remain active in Africa.
SOURCE: POOL RE



51.3%

More than half of global terrorist attacks from 2014 through 2018 on public areas occured in the Middle East and North Africa (MENA).

1,940

Terrorist attacks across MENA.

58.4%

Attacks that caused property damage.

15,512

Deaths.

SOURCE: POOL RE

Middle East and North Africa

Terrorism risks have decreased in line with the collapse of Islamic State across the Middle East and North Africa (MENA). However, risks persist to the energy sector, particularly oil and natural gas facilities.

Terrorism activity has declined since 2017 as IS suffered heavy territorial losses. Attacks fell by 64% in Syria and 32% in Iraq between 2017 and 2018. While the group no longer holds territory, it retains the ability to launch IED attacks in southern Syria and central and northern Iraq.

Private civilians and their property have been the principal targets of terrorism, with 42% of terror incidents in MENA between 2017 and 2018 targeting civilians. There is a growing risk of successful attacks on property and infrastructure in politically unstable countries, including Iraq, Syria, and Yemen. Houthi militants in Yemen have clear intent and increasing capability to target aviation assets, as well as sea vessels and oil infrastructure, using unmanned air and sea craft and ballistic missiles.

KEY TERRORIST ACTORS IN 2019

Islamic State	Al-Qaida
Hay'at Tehrir al-Sham	Ansar al-Sharia Libya
Hezbollah	

Which Sectors Are Most Exposed?

Energy

Terrorist attacks on oil and natural gas facilities have decreased from their peak in 2014-2015, but remain widespread. In Algeria, energy facilities remain vulnerable to cross-border militant attacks. Areas most at risk are facilities closest to Algeria's southern border with Mali and eastern border with Libya. In Iraq, there is evidence of increased attacks by IS against energy sector targets.

Cargo

There is an elevated risk of one-off attacks targeting cargo belonging to Western companies operating in Saudi Arabia. Companies most at risk include energy and fuel suppliers as well as those supplying religiously sensitive goods such as tobacco and luxury products. Risks are similarly elevated in Egypt, particularly in northern Sinai. Roadside IEDs pose high risks to cargo, particularly along the Suez-Ismailya-Port Said road that runs parallel to the Suez Canal.

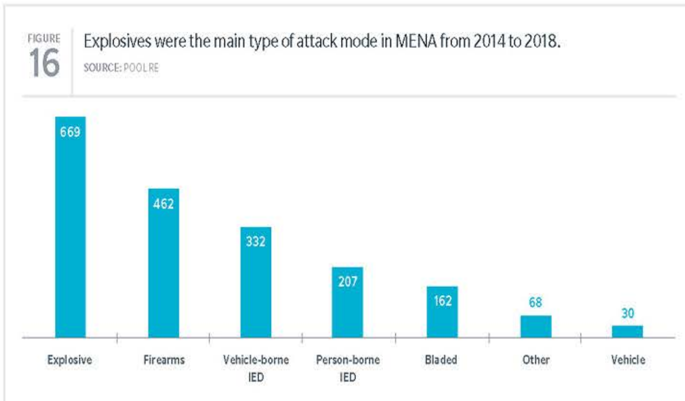


FIGURE
16
Explosives were the main type of attack mode in MENA from 2014 to 2018.
SOURCE: POOL RE
669
462
332
207
162
68
30
Explosive
Firearms
Vehicle-borne IED
Person-borne IED
Bladed
Other
Vehicle

KEY TERRORIST ACTORS IN 2019

- Abu Sayyuf (Philippines)
- Moro Islamic Liberation Front (Philippines)
- Jemaah Islamiya (Indonesia)
- Tehreek-e-Taliban Pakistan (Pakistan/Afghanistan)
- Baloch Seperatists (Pakistan)
- Al-Qaida in the Indian Subcontinent (Pakistan, India, Myanmar, Bangladesh)
- Jaish-e-Mohammed (Pakistan/Kashmir)
- Naxalite militants (India)
- Extreme right-wing groups (Australia/New Zealand)

Asia-Pacific

Terrorism risks vary across the Asia-Pacific region, with three countries among the ten most affected globally: Afghanistan, India, and Pakistan. At the other end of the spectrum, countries including Australia and Japan offer superior risk profiles.

Coordinated small-arms attacks by ERW actors in Australia and New Zealand are an exceptional but significant threat. Following the right-wing terrorist attack on two Christchurch mosques in March 2019, there is an increased risk of retaliatory attacks by Islamist extremists (see Figure 17). In Pakistan, the separatist movement in Balochistan presents a significant threat to the interests of Chinese firms. Sporadic attacks on Chinese individuals and infrastructural assets have resulted in a series of casualties since August 2018 and caused project disruption in the China-Pakistan Economic Corridor (CPEC). In the Philippines, the threat of Islamist militancy remains confined to southern provinces, primarily Mindanao, where small IED attacks against security forces are likely in the one-year outlook.

Which Sectors Are Most Exposed?

Transport Sector

Public transport systems have been aspirational targets for terrorist organizations operating throughout Asia-Pacific (see Figure 18). The 2017 Jakarta terrorist attacks in Indonesia targeted a bus terminal with IEDs, killing five people and injuring a dozen more. In 2019, public transport systems in India will be a higher-risk target for Pakistan-based militants.

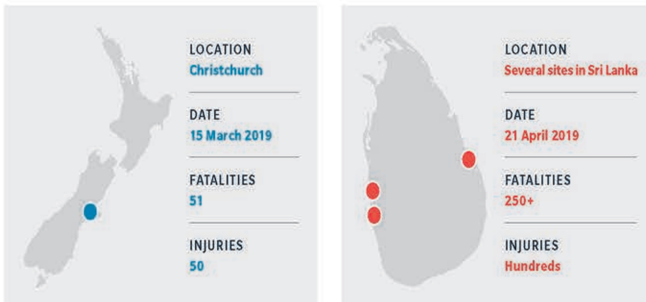
Public Spaces/Religious Institutions

Public spaces across Asia-Pacific are attractive targets for extremist Islamists, as well as right-wing actors in Australia and New Zealand. A stabbing in Melbourne, Australia in November 2018 targeted civilians in the central business district, killing one person and injuring two others. A firearms attack by an individual with extreme right-wing views on two mosques in Christchurch, New Zealand in March 2019 killed 51 and injured 50 others. And in April 2019, suicide bombings by a little-known Islamist group devastated churches and hotels across Sri Lanka, killing more than 250 people and injuring approximately 500 more.

FIGURE 17

New Zealand attacker targeted Muslims; Sri Lanka bombers attacked Christians.

SOURCE: POOL RE



Lone Wolf Attacker Targets NZ Muslims

A firearms attack on two mosques in Christchurch, New Zealand killed 51 people and injured 50 others. The perpetrator held extreme-right wing views, and is believed to have acted alone.

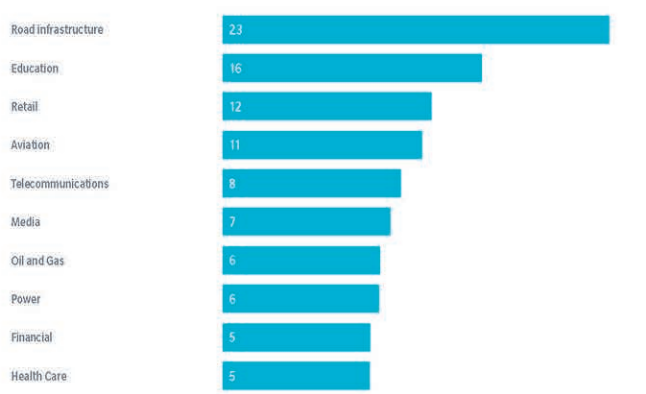
Attacks Across Sri Lanka on Easter Sunday

Suicide bombings at churches and hotels across Sri Lanka on Easter Sunday killed more than 250 people and injured hundreds more. Group claimed ties to IS.

FIGURE 18

Road infrastructure was the business sector most affected by Islamist terrorist incidents in the Asia-Pacific region from 2014 to 2018.

SOURCE: POOL RE



Recommendations

Understand Changes in Terrorist Attacks

The nature of terrorism is shifting away from large-scale attacks on property to less sophisticated ones, often carried out by individuals without ties to a particular group. Such changes can affect the way your organization prepares and responds to an incident.

Follow Shifting Geographical Risks

Terrorism can change over time in a given country or region. To best protect your business and people, it's important to know the risks in the areas where you do business.

Ensure the Right Coverage is in Place

Insurers have responded to changes with coverage such as active assailant coverage and non-damage business interruption. It's also important to know when a coverage such as political violence insurance may best suit the organization's needs, or when policies that wrap around existing coverage and government schemes may be most effective.

Stay up to Date on Legislation

Government schemes provide an important backstop in many areas. But, as with the US TRIPRA program, they can be subject to deadlines requiring periodic re-evaluation and reauthorization.

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WORLD RISK REVIEW

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At a time of global geopolitical uncertainty, firms can only exploit international business opportunities by adequately measuring and managing their risk exposure. WRR provides risk ratings across nine different perils for 197 countries, following a one-hour webinar to introduce the platform and provide an overview of credit, political, and security risk products.

Ratings are generated by a proprietary, algorithm-based modelling system incorporating over 200 international indices. The ratings deliver, quickly and easily, an understanding of political risk in any given country upon which a risk management strategy can be built. The six-week trial will commence upon the issuance of login details following a webinar.

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Testimony of Howard Kunreuther
James G. Dinan Professor of Decision Sciences and Public Policy
and co-director of the Wharton Risk Management and Decision Processes Center
The Wharton School, University of Pennsylvania

before

The Committee on Banking, Housing, and Urban Affairs

June 18, 2019

Chairman Crapo, Ranking Member Brown and Members of the Committee, I appreciate your inviting me to testify on "The Reauthorization of the Terrorism Risk Insurance Program." My name is Howard Kunreuther and I am the James G. Dinan Professor of Decision Sciences and Public Policy at the Wharton School, University of Pennsylvania and Co-Director of the Wharton Risk Management and Decision Processes Center. The Wharton Risk Center was founded in 1985 with a mission to examine alternative strategies for dealing with low-probability, high-consequence events (i.e. extreme events) based on an understanding of the decision processes of individuals, firms and public sector agencies.

Since the terrorist attacks of 9/11, the Wharton Risk Center has focused on the roles of the public and private sectors in providing adequate risk financing against terrorism threats. The Center produced several studies on the 2015 renewal of the Terrorism Risk Insurance Act (TRIA) and how it has performed, in consultation with key interested parties from the private and public sectors and other academic/research institutions.[1] My testimony will focus on the following four questions that I feel should be considered as one determines the specifics of the renewal of TRIA in 2020:

- What are the current risk sharing arrangements associated with TRIA?
- Who bears the cost of losses from a future terrorist attack under TRIA?
- How well are commercial firms protected against TRIA losses through private insurance?
- What modifications to current public-private partnerships should be considered?

[1] See: "A Successful (Yet Somewhat Untested) Case of Disaster Financing: Terrorism Insurance Under TRIA, 2002-2020," Risk Management and Insurance Review, 2018, 21(1): 157-180; "TRIA after 2014: Examining risk sharing under current and alternative designs," Wharton Risk Management and Decision Processes Center, University of Pennsylvania, July 2014; "Options Facing Congress in Renewing the Terrorism Risk Insurance Act (TRIA): A Quantitative Analysis," Wharton Penn Public Policy Initiative, University of Pennsylvania, July 2014; "Enhancing Post-disaster Economic Resilience: Public-Private Partnership for Insuring Terrorism," chapter 12 in Improving Homeland Security Decisions, Cambridge University Press, 2017.

1. Current Risk Sharing Arrangements

Under TRIA's 2015 renewed design, events certified as terrorism by the federal government and resulting in insured losses greater than a certain trigger in TRIA-eligible lines of business ($100 million in 2015 which is gradually increased up to $200 million over time) would be shared as follows:

- Commercial policyholders would be responsible for paying any losses within their standard insurance policy deductibles under TRIA. If these firms had declined to purchase terrorism coverage for property and business losses they will be fully responsible for their losses from an attack. Commercial insurance companies would then provide coverage for all losses in excess of these TRIA deductibles, provided that total insurance industry losses did not exceed $100 billion.
- Insurers are responsible for covering losses from a TRIA deductible (D*) set equal to 20% of that company's prior year's Direct Earned Premium (DEP) for the lines covered under the program, after which the federal government would then reinsure the commercial insurer's terrorism losses. *D** has increased significantly over time: 1% in 2002, 7% in 2002 and 2003, 10% in 2004, 15% in 2005, 17.5% in 2006, and 20% since 2007 and has remained at that level for the 2015 renewal of TRIA. For large insurers, this TRIA deductible can be significant.
- Losses in excess of each insurer deductible would be shared between the insurance company and the federal government; federal share of compensation was set at 85% of insured losses that exceed insurer deductibles until January 1, 2016. Then the federal share is decreased by 1 percentage point per calendar year until it reaches 80% (Figure 1 shows the 80-20 loss sharing).
- Should total insurance industry losses exceed $100 billion, primary insurers are responsible for reimbursing policyholders only for their proportionate share of losses up to $100 billion and Congress shall determine the procedure and source of any payments for the uninsured losses.

Figure 1 depicts the public-private loss sharing for a representative insurer covering terrorism for its commercial policyholders (either through workers' compensation or property insurance) under the current TRIA arrangement when total insured losses are less than $100 billion. If a terrorism loss incurred by an insurance company (i) is less than its TRIA deductible amount (ID_i), as determined as a percentage of its prior year Direct Earned Premium (DEP) in TRIA-eligible lines, the insurer does not receive any reimbursement from the federal government. This situation is illustrated by an insured loss of L_1 where the insurer's payment is represented by the oblique lines on the left side of Figure 1.

When the insured loss from a certified terrorist attack is above the insurer's deductible, as depicted by L_2 in Figure 1, the insurer pays the entire claim and the federal government reimburses the insurer for 83% in 2017, 82% in 2018, 81% in 2019 and 80% of the losses above its deductible starting on January 1, 2020. We consider the 80% loss sharing in Figure 1 as an illustrative example. The horizontal lines on the right side of the figure represent the federal payment. ID_i plays an important role in determining loss sharing between insurers and the federal government and can amount to very large sums for many insurers. Should a terrorist attack occur in 2020, insurers will be responsible for losses equal to 20% of their Direct Earned Premium in 2019.

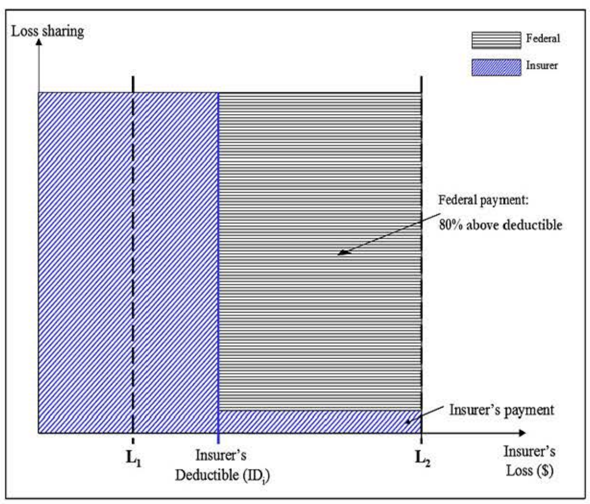

FIGURE 1: LOSS SHARING UNDER TRIA BETWEEN AN INSURER AND THE FEDERAL GOVERNMENT

Note: the loss sharing between the federal government and an insurer was 85-15% in 2015, then 84-16% in 2016, 83-17% in 2017, 82-18% in 2018, 81-19% in 2019 and 80-20% of losses above deductible in 2020.

The federal government recoups its payments between the total insurers' outlays and a mandatory recoupment amount that will by levying surcharges on all commercially insured policyholders (at a 140% rate). Should uncompensated insurer outlays across the insurance industry exceed the mandatory recoupment amount, the U.S. Treasury has the option to collect some or all federal payments over time through a discretionary recoupment mechanism; see Figure 2).

If the entire insurance industry suffers terrorism losses on their U.S. portfolio that requires the government to cover a portion of their claims, then these outlays shall be fully or partially recouped *ex post*, as described above. Insurers levy this surcharge against all commercial property and casualty policyholders, whether or not they had purchased terrorism insurance, and transfer the collected funds to the Treasury.

Figure 2 depicts the repayment schedule between all the insurers whose policyholders suffer an insured terrorist attack (the area depicted by oblique lines), all commercial policyholders (solid area) and the taxpayers (area depicted by horizontal lines) after the federal government has reimbursed all insurers for their share of their claims payments above their individual TRIA deductible level.

In the example considered here, since the total insured loss L for the entire insurance industry is greater than the industry retention (set at $27.5billion in 2015, and increased by $2 billion a year until it reaches $37.5 billion) but total losses retained by insurers within their deductibles (D_i) and coinsurance requirements are below the market aggregate retention of $37.5 billion (assuming as an example this is the threshold the year the attack occurs), a portion of the federal outlays are subject to the mandatory recoupment.

Should the federal government elect to exercise its authority to levy a discretionary recoupment surcharge against commercial policyholders to fund federal outlays not covered by the mandatory recoupment mechanism, there would be a 1-for-1 reallocation of loss from taxpayers to commercial policyholders. For our analysis, we do not allocate losses to the discretionary recoupment mechanism as it reflects one of many alternatives by which the federal government could fund uncompensated federal outlays.

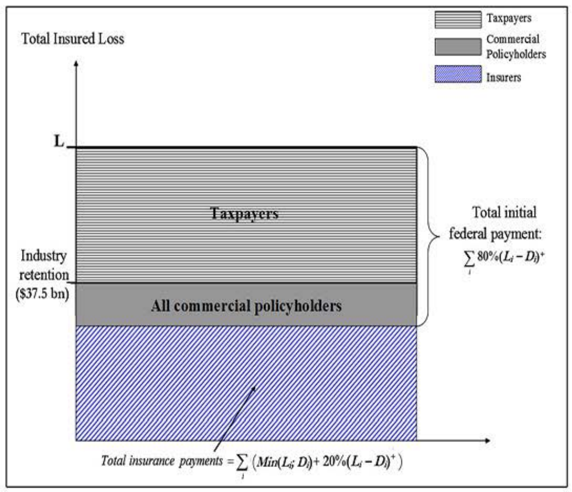

FIGURE 2: OVERALL LOSS SHARING UNDER TRIA

2. Analysis of Loss Sharing under 2015 TRIA Legislation

How would losses from such terrorist attacks be distributed across insurers, commercial policyholders and the federal government?

The Wharton Risk Center utilized data on 764 insurers that comprised virtually 100% of the terrorism insurance market placed with U.S. licensed primary insurance carriers with respect to TRIA-line direct earned premiums at the end of 2012. Property insurance lines have been separated from workers' compensation (WC) lines. Analyzing the entire spectrum of possible losses from zero the $100 billion, the amounts paid by the relevant stakeholders as a function of losses to New York City from a terrorist attack are depicted in Figure 3. (Analyses undertaken for Chicago, Houston and Los Angeles produced similar findings.) The following key findings emerge:

- Insurers will always pay more than any other stakeholder.
- The federal government will not be responsible for any payments under TRIA 2015 until the total insured and uninsured losses from a terrorist attack exceed $60 billion. At this level of loss, insurers would pay $25.5 billion, commercial policyholders $16.85 billion; the remaining $18 billion would be uninsured.

- When total insured and non-insured losses reach $100 billion, insurers will ultimately be responsible for approximately $33.15 billion in payments, taxpayers almost $30.75 billion, the commercial policyholders over $6.1 billion (through mandatory recoupment at a 140% rate); the remaining $30 billion would be uninsured.
- Commercial policyholders would almost always pay some post disaster governmental recoupment. The maximum they would pay – $18.5 billion – is reached when losses are $55 billion.

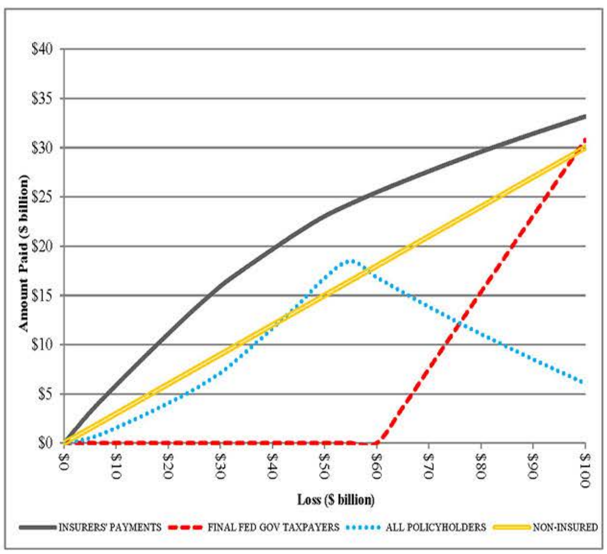

FIGURE 3: AMOUNT PAID BY STAKEHOLDERS FOR DIFFERENT LOSS AMOUNTS FROM TERRORIST ATTACKS IN NEW YORK CITY UNDER THE 2015 TRIA LEGISLATION

3. Protecting Firms against Losses from a Terrorist Attack

TRIA's most important success has been to significantly increase the demand for terrorist coverage by commercial firms and to stabilize the cost of coverage.

Take-up Rates of Terrorism Coverage

Based on the recent Marsh *2019 Terrorism Risk Insurance Report* (May 2019) around 60% of firms purchased terrorism coverage during 2014-2018. According to the Marsh report, education institutions, media organizations, financial institutions, and real estate companies were the most frequent buyers of terrorism coverage in 2018 while transportation and hospitality and gaming companies spent the most on terrorism as a percentage of their total premium spend due to their perceived vulnerability

The remaining 40% should not necessarily be interpreted as totally uninsured, as firms can purchase stand-alone terrorism insurance coverage for all their U.S. and foreign operations that is not dependent on TRIA. Firms can also be self-insured through the use of dedicated captives and/or structured debt (e.g., warrants, convertible and forgivable debt) and contingent capital (i.e., financing that is contingent on the occurrence of specified events). Moreover, a number of smaller companies may be insured without utilizing these larger insurance brokers.

According to the Marsh report, a higher percentage of companies in major cities in the northeastern United States purchased property terrorism insurance in 2018 than in other parts of the country presumably because they feel they are at a higher risk of a future terrorist attack. New York City and Chicago had the largest percentage of firms with coverage (80%) followed by Atlanta (79%), San Francisco (70%), Los Angeles (63%) and Houston (61%).

Costs of Terrorism Coverage

As indicated in the Marsh report, in 2018, larger firms with greater than $1 billion in Total Insured Value (TIV) paid about 4.5 times less on average ($14 per million dollars of coverage) than the smaller firms with less than $100 million in TIV ($62 per million dollars of coverage). This reflects insurance pricing patterns: larger companies typically purchase more insurance which leads to lower average rates per dollar of coverage compared to rates for smaller companies.

4. Modifying TRIA Public-Private Partnerships

The TRIA risk-sharing arrangement between private insurers, commercial policyholders and the general taxpayer recognizes the importance of a public-partnership for providing terrorism insurance to commercial firms. There are several areas where Congress should consider a role that the federal government could play in providing protection against risks that are currently viewed as uninsurable, and in incentivizing commercial enterprises to invest in cost-effective mitigation measures for reducing losses from terrorist attacks.

In developing proposals to take steps now to reduce future losses, it is useful to understand individuals' decision processes. A large body of cognitive psychology and behavioral decision research over the past fifty years has revealed that decision-makers are often guided by emotional reactions and simple rules of thumb that have been acquired through personal experience. Decision errors can be traced to the effects of six biases summarized in Box 1. These intuitive thought processes do not work well for making choices with respect to undertaking protective measures for extreme events such as terrorism where the insurer and firm has limited or no past experience.

Box 1. Biases that Characterize Intuitive Thinking

Myopia: The tendency to focus on overly short future time horizons when appraising immediate costs and the potential benefits of protective investments

Amnesia: The tendency to forget too quickly the lessons of past disasters

Optimism: The tendency to underestimate the likelihood that losses will occur from future hazards

Inertia: The tendency to maintain the status quo or adopt a default option when there is uncertainty about the potential benefits of investing in alternative protective measures

Simplification: The tendency to selectively attend to only a subset of relevant facts when making choices involving risk

Herding: The tendency to base choices on the observed actions of others

Source: Meyer, R. and Kunreuther, H. (2017) *The Ostrich Paradox: Why We Underprepare for Disasters.* Wharton School: Wharton Digital Press

Below, I consider several areas where the key stakeholders concerned with terrorism protection could develop proposals that address these biases in ways that encourage long-term thinking.

Incentivizing Cost-effective Mitigation Measures by Firms

One of our greatest weaknesses as decision-makers is that our intuitive planning horizons are typically shorter than those that are needed to appreciate the long-run value of protective investments. Controlled experiments and field surveys with respect to investment decisions reveal a ***myopic bias***. While decision makers in firms might recognize the need for a safer facility with respect to a terrorist attack, the immediate upfront costs of investments loom large compared to the potential for reduced losses in the next few years, not to mention the impact this expenditure will have on the firm's bottom line.

Proposal: Based on the Federal Emergency Management Agency (FEMA) program for encouraging property owners to invest in mitigation measures that reduces natural disaster losses, the federal government could offer firms long-term loans to spread the cost of risk reduction measures for reducing terrorism-related losses. Insurers should consider providing premium discounts reflecting their estimates of lower claim payments to firms that invest in these protective measures. If mitigation investments are cost-effective, then the annual premium reductions will be greater than the cost of the annual loan so that firms will have a short-term economic incentive to invest in protection now.

Federal Protection against Catastrophic Losses

Following the 9/11 events, insurers were concerned that catastrophic losses from future terrorist attacks would have a severe negative impact on their surplus and possibly lead to insolvency. Empirical evidence provided by experts on terrorism threats supports their concerns. Attacks using nuclear, biological, chemical and radiological (NBCR) weapons have the potential to inflict very large insured losses, especially on workers' compensation and business interruption lines. For this reason, it is important for Congress to explicitly address their role in covering losses from NBCR in the renewal of TRIA rather than exhibiting an ***optimism or amnesia bias*** by feeling that it will not happen in the United States because it has not occurred to date. Other countries (for example the United Kingdom and France), have included NBCR in coverage provided by their national terrorism (re)insurance program.

Proposal: The federal government should cover NBCR losses from future terrorist attacks and recoup their expenditures under TRIA in a similar fashion as they currently do.

Behavior of Insurers and Congress after a Terrorist Attack

Since 9/11, there has not been a terrorist attack in the United States, thus enabling insurers to build up considerable surplus in providing this coverage to many commercial firms. Should there be a severe terrorist attack in the future that causes significant losses, it is unclear what action insurers will take immediately following the event. Will premiums significantly increase and future coverage decrease because insurers exhibit the ***simplification bias*** by focusing on their severe losses rather than also considering the likelihood of a future terrorist attack? What will Congress do if insurers significantly raise their premiums so that many commercial firms feel they cannot afford to purchase terrorism protection?

Proposal: Insurers should consider offering multi-year commercial insurance that includes terrorism coverage where the premium remains the same for two or three years. They can charge a slightly higher premium for the two- or three-year coverage than their annual policy premium to protect themselves against a few firms canceling their policies after one year. Reinsurers would also need to provide multi-year reinsurance policies to protect insurers against severe losses. Controlled experiments have revealed that there is increased demand for two-year policies, even when the premium is somewhat higher than an annual policy, to avoid having a much higher premium following a severe disaster.

Dealing with Interdependencies

One of the challenges facing private insurers is dealing with problems of interdependencies due to the ***herding bias***. The vulnerability of an organization depends to some extent not only on its own choice of protective investments, but also on the actions of other firms. Failures of a weak link in a connected system could have devastating impacts on all parts of it. As a result, there may be suboptimal investment in the individual components. A current example of this type of interdependency is cyber risk where compromising one computer network can cause losses to many others in the interconnected system. The existence of such interdependencies provides challenges to insurers in determining whether to offer protection against this risk in their terrorism coverage and if so what premium to charge.

Proposal: The Department of the Treasury should interact with private insurers to determine what interdependent risks (e.g. cyber) would be included under the TRIA backstop.

5. Conclusion

In developing proposals for public-private partnerships, Congress and other key stakeholders should examine how other countries cope with the terrorism risk to determine whether these approaches merit consideration for the United States. For example, the public and private sectors could provide economic incentives in the form of lower taxes, subsidies, lower insurance premiums, multi-year reinsurance policies and other risk transfer instruments such as catastrophe bonds. These policy tools will encourage those at risk to adopt higher security and loss reduction measures. It also is likely that there will be a need for well-enforced regulations and standards that complement these incentive programs.

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TESTIMONY

Statement of

Baird Webel
Specialist in Financial Economics

Before

Committee on Banking, Housing, and Urban Affairs
U.S. Senate

Hearing on

"The Reauthorization of the Terrorism Risk Insurance Program"

June 18, 2019

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Mr. Chairman, Ranking Member, and Members of the Committee, thank you for the opportunity to testify before you today. My name is Baird Webel, a specialist in Financial Economics at the Congressional Research Service (CRS) focusing on nonhealth insurance issues including terrorism risk insurance. I have been in this role at CRS since 2003 and have covered the previous reauthorizations of the Terrorism Risk Insurance Act (TRIA). CRS's role is to provide objective, nonpartisan research and analysis to Congress. CRS takes no position on the desirability of any specific policy. Any arguments presented in my written and oral testimony are for the purposes of informing Congress, not to advocate for a particular policy outcome.

My testimony today will begin with a brief introduction and overview of TRIA and a discussion of significant policy concerns from past reauthorizations that may inform the current debate. I will then provide a general background on terrorism insurance and the terrorism insurance market pre- and post-TRIA, and conclude with a side-by-side comparison of previously enacted terrorism insurance laws, based on my previous work at CRS.[1]

Introduction

Prior to the September 11, 2001, terrorist attacks, insurance covering terrorism losses was normally included in commercial insurance policies without additional cost to the policyholders. The insured losses on all insurance lines from the September 11 attacks exceeded $45 billion in inflation-adjusted dollars, an amount well above other insurance industry experiences with terrorism losses. Following September 2001, insurers and reinsurers pulled back from offering terrorism coverage. Some observers feared that a lack of insurance against terrorism loss would have a wide economic impact, particularly because insurance coverage can be a significant factor in lending decisions.

Congress responded to the disruption in the insurance market by passing the Terrorism Risk Insurance Act of 2002 (P.L. 107-297). TRIA created a temporary three-year program to calm markets through a government reinsurance program sharing in terrorism losses. This program was intended to give the insurance industry time to gather the data and create the structures and capacity necessary for private insurance to cover terrorism risk.

TRIA did (and does) not cover terrorism losses directly but instead reimburses private insurers for a portion of their losses. The act does not require private insurers to pay premiums for the government coverage. However, it does require private insurers to offer commercial insurance for terrorism risk, which private insurers were not willingly offering prior to TRIA's enactment. In addition, TRIA provides that the government recoups some or all federal payments under the act from insurers in the years following government coverage of insurer losses. TRIA is limited to commercial property and casualty insurance. It does not cover losses in health or life insurance, nor does it cover losses in personal property lines, such as homeowners insurance.

The original TRIA legislation's stated goals were to (1) create a temporary federal program of shared public and private compensation for insured terrorism losses to allow the private market to stabilize; (2) protect consumers by ensuring the availability and affordability of insurance for terrorism risks; and (3) preserve state regulation of insurance.

To meet the *first* goal, the TRIA program created a mechanism through which the federal government could share insured commercial property and casualty losses with the private insurance market.[2] The role

[1] These sections adapted from CRS Report R45707, *Terrorism Risk Insurance: Overview and Issue Analysis for the 116th Congress*, by Baird Webel.

[2] Commercial insurance is generally insurance purchased by businesses, in contrast to personal lines of insurance, which are purchased by individuals. This means damage to individual homes and autos, for example, would not be covered under the TRIA

of federal loss sharing depends on the size of the insured loss. For a relatively small loss, there is no federal sharing. For a medium-sized loss, the federal role is to spread the loss over time and over the entire insurance industry. The federal government provides assistance up front but then recoups the payments it made through a broad levy on insurance policies afterward. For a large loss, the federal government is to pay most of the losses, although recoupment is possible (but not mandatory) in these circumstances as well. The precise dollar values where losses cross these small, medium, and large thresholds are uncertain and will depend on how the losses are distributed among insurers.[3]

TRIA addresses the *second* goal—to protect consumers—by requiring insurers that offer TRIA-covered lines of insurance to make terrorism insurance available prospectively to their commercial policyholders.[4] This coverage may not differ materially from coverage for other types of losses.

TRIA's *third* goal—to preserve state regulation of insurance—is expressly accomplished in Section 106(a), which provides that "Nothing in this title shall affect the jurisdiction or regulatory authority of the insurance commissioner [of a state]." The Section 106(a) provision has two exceptions, one permanent and one temporary (and expired): (1) the federal statute preempts any state definition of an "act of terrorism" in favor of the federal definition and (2) the statute briefly preempted state rate and form approval laws for terrorism insurance from enactment to the end of 2003. In addition to these exceptions, Section 105 of the law also preempts state laws with respect to insurance policy exclusions for acts of terrorism.

In the years following 2002, terrorism insurance became widely available and largely affordable, and the insurance industry greatly expanded its financial capacity. There has been, however, little apparent success in developing a longer-term private solution, and fears have persisted about the economic consequences if terrorism insurance were not available. Thus, although explicitly designed as a three-year program, TRIA has been extended three times—in 2005 (P.L. 109-144), in 2007 (P.L. 110-160), and in 2015 (P.L. 114-1). TRIA is currently set to expire at the end of 2020.

Congress has gradually adjusted the precise program details under TRIA, including the following:

- the program trigger, an aggregate minimum loss threshold below which no government loss-sharing occurs;
- the federal share of insured losses;
- the insurer deductible, an amount based on each insurer's premium volume; and

program. Property and casualty insurance generally includes most lines of insurance except for life insurance and health insurance. The TRIA statutory definition in §102(11) specifically excludes "(i) federal or private crop insurance; (ii) private mortgage insurance or title insurance; (iii) financial guaranty insurance issued by monoline insurers; (iv) medical malpractice insurance; (v) health or life insurance, including group life insurance; (vi) federal flood insurance; (vii) reinsurance or retrocessional reinsurance; (vii) commercial automobile insurance; (ix) burglary and theft insurance; (x) surety insurance; (xi) professional liability insurance; or (xii) farm owners multiple peril insurance."

[3] For example, for loss sharing to occur, an attack must meet a certain aggregate dollar value and each insurer must pay out a certain amount in claims—known as its deductible. For some large insurers, this individual deductible might be higher than the aggregate threshold set in statute, meaning that loss sharing might not actually occur until a higher level than the figure set in statute.

[4] Each terrorism insurance offer must reveal both the premium charged for terrorism insurance and the possible federal share of compensation. Policyholders are not, however, required to purchase coverage under TRIA. If a policyholder declines to purchase terrorism coverage, the insurer may exclude terrorism losses. Federal law does not limit what insurers can charge for terrorism risk insurance, although state regulators typically have the authority under state law to modify excessive, inadequate, or unfairly discriminatory rates. Although the purchase of terrorism coverage is not required under federal law, the interaction of TRIA and state laws on workers' compensation insurance results in most businesses being required to purchase terrorism coverage in workers' compensation policies.

- the insurer aggregate retention amount, the total losses to be retained by the insurers if there is postevent recoupment.

In most cases, the congressional changes have been designed to reduce the federal share of potential losses and increase private-sector contributions, with the exception of a change in 2007 that removed a requirement that covered terrorist events must be foreign in origin. In addition to these thresholds that have changed, the act's requirement that a single attack must cause a minimum of $5 million in insured damages to be certified under TRIA has remained unchanged.

The United States has suffered terrorist attacks since the passage of TRIA, but no acts of terrorism have been certified and no federal payments to insurers have occurred under TRIA. For example, although the April 2013 bombing in Boston was termed an "act of terror" by President Obama,[5] the insured losses in TRIA-eligible insurance from that bombing did not cross the $5 million statutory threshold to be certified under TRIA.

The administration of the TRIA program was originally left generally to the Treasury Secretary. The Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010[6] created a new Federal Insurance Office (FIO) to be located within the Department of the Treasury. Among the FIO duties specified in the legislation was to assist the Secretary in administering the Terrorism Insurance Program.[7]

The criteria under the TRIA program in 2019 are as follows:

1. An individual act of terrorism must be certified by the Secretary of the Treasury, in consultation with the Secretary of Homeland Security and Attorney General; losses must exceed $5 million in the United States or to U.S. air carriers or sea vessels for an act of terrorism to be certified.
2. The federal government shares in an insurer's losses due to a certified act of terrorism only if "the aggregate industry insured losses resulting from such certified act of terrorism" exceed $180 million (increasing to $200 million in 2020).[8]
3. The federal program covers only commercial property and casualty insurance, and it excludes by statute several specific lines of insurance.[9]
4. Each insurer is responsible for paying a deductible before receiving federal coverage. An insurer's deductible is proportionate to its size, equaling 20% of an insurer's annual direct earned premiums for the commercial property and casualty lines of insurance specified in TRIA.
5. Once the $180 million aggregate loss threshold and 20% deductible are met, the federal government would cover 81% of each insurer's losses above its deductible until the amount of losses totals $100 billion.
6. After $100 billion in aggregate losses, there is no federal government coverage and no requirement that insurers provide coverage.
7. In the years following the federal sharing of insurer losses, but prior to September 30, 2024, the Secretary of the Treasury is required to establish surcharges on TRIA-eligible property and casualty insurance policies to recoup 140% of some or all of the outlays to

[5] The White House, "Statement by the President," press release, April 16, 2013, at http://www.whitehouse.gov/the-press-office/2013/04/16/statement-president.

[6] P.L. 111-203, 124 Stat. 1376.

[7] §502 of P.L. 111-203, codified at 31 U.S.C. §313(c)(1)(D).

[8] 15 U.S.C. §6701 note, §103(e)(1)(B).

[9] 15 U.S.C. §6701 note, §102(11).

insurers under the program. If losses are high, the Secretary has the authority to assess surcharges, but is not required to do so.

Possible Issues for TRIA Reauthorization

Although nearly two decades have passed since Congress considered terrorism insurance in the aftermath of September 11, 2001, the fundamental policy issues grappled with by Congress have remained largely the same: (1) Is a federal terrorism insurance program needed or can the private market adequately address terrorism risk? (2) If a federal program is needed, how should insurers share in funding terrorism risk? and (3) What should the program cover? Are there specific risks that need particular treatment under the program?

Is a Federal Terrorism Insurance Program Needed?

In the original act, the 107th Congress was quite clear that TRIA not be considered a permanent program, specifically describing it as "temporary" twice and terming its three-year span as a "transitional period for the private markets to stabilize, resume pricing of such insurance, and build capacity to absorb any future losses…."[10] Even the codification of P.L. 107-297 could be seen as reflecting this temporary nature; TRIA was added as a note to a code section relating to state insurance regulation, not as a separate section of its own.[11]

The market experience in the years since TRIA's initial passage has been much calmer than the year following September 11, 2001. Terrorism insurance coverage has been available at pricing sufficiently reasonable that take-up rates approach 80% in the latest Treasury data collections. This relative calm has extended into markets beyond terrorism insurance. Property and casualty insurers as a whole have increased their combined surplus from $408.6 billion (inflation adjusted) at the start of 2002 to $686.9 billion at the end of 2017.[12] On the whole, insurance and reinsurance pricing has been surprisingly stable despite two extraordinary years for hurricane losses (2005 and 2017) and a global financial crisis in 2008.

The relative market calm has, however, been underpinned by the existence of TRIA. Insurers are required to offer terrorism coverage under the act and it seems possible that insurers would again seek to exclude terrorism losses if this requirement were to be removed. For example, when TRIA briefly lapsed at the end of 2014, conditional terrorism exclusions that had been included in insurance filings with state insurance regulators were activated.[13] Exactly how widespread these exclusions would be applied if TRIA were completely removed, however, is unclear. It is possible that competitive pressure might cause insurers to cover terrorism risk even without TRIA. The latest Treasury report found that 30% of terrorism coverage that is provided in conjunction with other property and casualty insurance is offered without specific premiums being charged, which suggests that the perceived terrorism risk is low for some of the insureds.[14]

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[10] P.L. 107-297, §101.

[11] TRIA is codified at 15 U.S.C. §6701 note.

[12] AM Best, *Best's Aggregates & Averages, Property-Casualty*, 2002 Edition, p. 2; and AM Best, *Best's Aggregates & Averages, Property-Casualty*, 2018 Edition, p. 2. Inflation adjustment from the Bureau of Labor Statistics' CPI inflation calculator at https://data.bls.gov/cgi-bin/cpicalc.pl. Actual 2002 figure is $293.5 billion.

[13] See, for example, Verisk, "ISO Conditional Terrorism Endorsements to Come into Play with TRIA's Lapse," press release, December 18, 2014, at https://www.verisk.com/archived/2014/december/iso-conditional-terrorism-endorsements-to-come-into-play-with-tria-s-lapse/.

[14] Department of the Treasury, Federal Insurance Office (FIO), *Report on the Effectiveness of the Terrorism Risk Insurance Program*, June 2018, p. 19.

The insurance industry uses tools to model and mitigate catastrophe risks, such as hurricanes. Many analysts argue, however, that the tools to address terrorism risk have not been developed as successfully as was hoped when TRIA was initially enacted. Insurance works best with a large amount of data to develop estimates for the likelihood and size of future losses. However, terrorist attacks are relatively rare and much of the data about various terrorist threats may be closely held by the government due to national security concerns, thus further reducing data available for private firms. Furthermore, the fact that terrorism is carried out by purposeful actors who shift strategies and tactics adds another layer of complication to modeling techniques that are used with phenomena such as hurricanes. The purposeful nature of the actors also increases potential damage from terrorist attacks because it reduces the effectiveness of mitigation techniques.

How Should Insurers Share in Funding Terrorism Risk?

Insurance contracts in the private sector typically have three mechanisms by which insurers and insureds share the risk of loss. Premiums paid by insureds provide capital to prefund part of the loss, and after a loss, insureds will often pay deductibles (a set amount paid prior to insurance coverage) and copayments (a percentage of the losses). The TRIA program uses somewhat similar concepts, which have been adjusted in different ways over the program's life. The three mechanisms TRIA uses to share the risk are as follows:

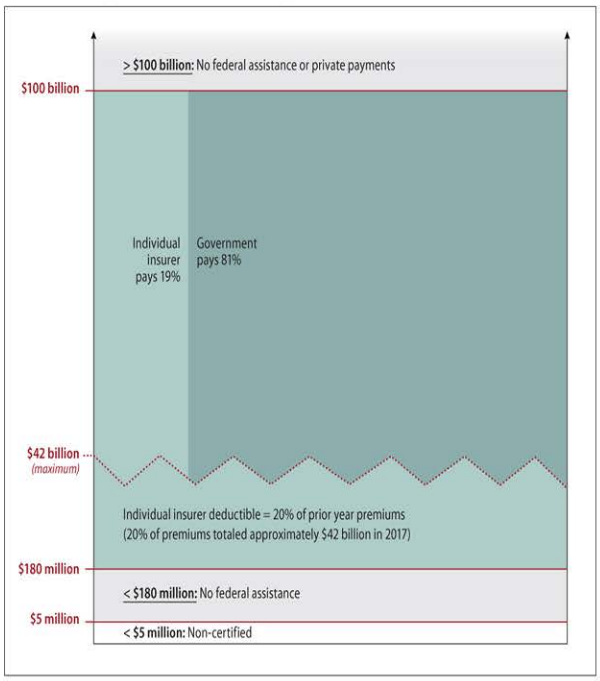
- *Deductible*. In an unusual structure, TRIA essentially has a two-stage deductible. TRIA provides directly for an "insurer deductible" that is equal to 20% of each company's direct earned premiums for TRIA-eligible lines of insurance. In addition, TRIA includes a "program trigger," the amount aggregate insured losses must clear before any funding flows out of the Treasury. The program trigger is $180 million in 2019 and increases to $200 million in 2020. If the program trigger is not cleared, an insurer would receive no federal funding even if its individual deductible is exceeded. For approximately the largest 40-50 insurers, the 20% deductible is larger than the program trigger, so for these companies the trigger is essentially irrelevant.[15] For the rest of the companies, depending on the distribution of the losses, it is possible that they might have to bear losses larger than their deductible prior to receiving funds under TRIA.
- *Insured Loss Share Compensation*. This is essentially equivalent to a copayment. Above the program trigger or deductible, private insurers cover 19% of the losses covered under TRIA, rising to 20% in 2020. (The statute is actually written in the inverse, defining the term as the amount paid by the federal government.)
- *Terrorism Loss Risk-Spreading Premiums*. These risk-spreading premiums, used to fund the losses, are similar in concept to premiums paid by normal insureds to private insurers, but in operation, they are quite different. Unlike premiums in most insurance, the TRIA premiums are only paid after the losses, not before. Thus, there are no funds built up to pay future losses, as there are in almost all other types of insurance. These postevent premiums are to be either mandatory or discretionary based on the size of the insured losses compared with the insurer aggregate retention amount set in the statute ($37.5 billion in 2019). If recoupment is mandatory, the amount to be recouped is to be 140% of the federal outlays actually made and the recoupment must occur prior to September 30,

[15] Based on 2017 data provided to CRS by the Treasury, the top 52 insurers would have had deductibles clearing the $140 million program trigger in place at the time, and 42 insurers would have had deductibles clearing the $200 million figure that will be in place in 2020. Of course, by 2020, inflation will likely have increased the total premiums amounts, and there may have been mergers by insurers that would alter the exact premiums amounts.

2024, which coincides with the 10-year window used by the Congressional Budget Office (CBO) for scoring the last reauthorization legislation.

The initial loss sharing under TRIA can be seen in **Figure 1**, adapted from the Congressional Budget Office. The exact amount of the 20% deductible at which TRIA coverage would begin depends on how the losses are distributed among insurance companies. In the aggregate, 20% of the direct-earned premiums for all of the property and casualty lines specified in TRIA totaled approximately $42 billion in 2017, according to the latest data collected by the Treasury Department. TRIA coverage is likely, however, to begin well under this amount, as the losses from an attack are unlikely to be equally distributed among insurance companies.

Figure 1. Initial Loss Sharing Under Current TRIA Program



Source: Congressional Research Service (CRS), adapted from Congressional Budget Office, *Federal Reinsurance for Terrorism Risks: Issues in Reauthorization*, August 1, 2007, p. 12.

Note: According to Department of the Treasury data and CRS calculations, the aggregate of all individual insurer deductibles totaled approximately $42 billion in 2017. Loss sharing is likely to begin well under this amount, as the distribution of terrorism losses is unlikely to be equally spread among insurers.

Since its enactment, amendments to TRIA have changed all three of these mechanisms so that increasing amounts of losses are to be borne by private insurers. The individual insurer deductibles have increased from 7% of premiums in 2003 to 20% in 2007 and thereafter. The program trigger did not exist until 2006, started at $50 million, and will be $200 million in 2020. The private insurer share of losses was originally 10% and will be 20% in 2020. The recoupment premiums were originally set at 100% of losses, with the aggregate retention amount set at $10 billion. The 100% recoupment was increased to 133% in 2007 and 140% in 2015,[16] whereas the aggregate retention amount was increased gradually through most of the program's life. In addition to other changes in the levels of the various mechanisms within the TRIA program to share terrorism risk among the government and private insurers, Congress also might consider employing different mechanisms to share such risk. For example, in past reauthorizations of TRIA, some have proposed that Congress create specific reserves to fund future terrorism claims.[17] These reserves might be within the insurance companies' capital structures or might be held in a sort of separate account and would have been funded by policyholder premiums paid to the insurance companies. It would also be possible to fund some sort of terrorism reserve fund in the Treasury through up-front premiums charged by the government to private insurers rather than relying on postevent recoupment premiums.[18]

What Should a Federal Terrorism Insurance Program Cover?

From the original statute's enactment, the TRIA program has been designed to work in the background through the private insurance system. Congress defined certain commercial insurance lines as within the TRIA program and excluded others. For these TRIA-eligible lines, insurers must offer coverage for terrorism damage claims that "does not differ materially" from the terms and conditions applied to claims made due to other causes of damage. This greatly simplified the program's creation and has allowed the Treasury Department to administer the program with only a handful of people for the past 17 years. Some property and casualty lines were removed from the program in the 2005 reauthorization, and some legislation in the past would have added some lines to TRIA, but the basic principle of working through private policies has remained constant.

The requirement that terrorism coverage be offered under the same terms and conditions as coverage for damage from other sources means that, for example, if an insurer offers a policy covering a commercial building for fire damage due to some accidental cause, it must also offer a policy covering that building for fire damage due to terrorism. However, if the insurer decided to exclude coverage from fire damage altogether, regardless of the source, the insurer could also do so with regard to fire damage from terrorism. This may seem on first glance to be a relatively minor legalistic point of insurance policy language, but it could have an important impact on the potentially most damaging form of terrorist attacks.

Some observers consider a terrorist attack with some form of a nuclear, chemical, biological, or radiological (NCBR) weapon to be the most likely type of attack causing large-scale losses.[19] The current

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[16] According to a Congressional Budget Office (CBO) working paper, the amount was set to 133% to offset the corporate tax reduction occurring as policyholders deducted the recoupment charges. The 140% amount "provides some additional compensation to the government for bearing risk." David Torregrosa et al, *Federal Reinsurance for Terrorism Risk in 2015 and Beyond*, CBO, Working Paper no. 2015-04, June 2015, at http://www.cbo.gov/sites/default/files/114th-congress-2015-2016/workingpaper/50171-TRIA_Working_Paper_1.pdf.

[17] See, for example, H.R. 4314 in the 109th Congress or H.R. 2167 in the 110th Congress.

[18] This structure was used in, for example, the Federal Aviation Administration's Aviation War Risk Program, which was expanded following September 11, 2001. This program was eventually allowed to expire with a substantial positive balance for the Treasury.

[19] There is some variance in the acronym used for such attacks. The U.S. Department of Defense, for example, uses "CBRN," rather than NCBR, in its *Dictionary of Military and Associated Terms*; see p. 34 at https://www.jcs.mil/Portals/36/Documents/Doctrine/pubs/dictionary.pdf.

TRIA statute does not specifically include or exclude NBCR events; thus, the TRIA program in general would cover insured losses from terrorist actions due to NCBR as it would for an attack by conventional means. However, most of the commercial policies that TRIA covers would *exclude* damage from an NBCR cause regardless of whether it is accidental or due to terrorism.[20] Thus, despite the TRIA requirement to offer terrorism coverage (and the 70%-80% reported take-up rate of this coverage), most purchasers of terrorism insurance may not be covered for damage from a terrorist attack using chemical gas, a radiological "dirty" bomb, or any of dozens of other similar scenarios that could result in extremely large losses.

Congress addressed the issue of NCBR coverage in the 2005 reauthorization, which called on the President's Working Group on Financial Markets to study the question, and the 2007 reauthorization, which called for a Government Accountability Office (GAO) study. The GAO report was issued in 2008, finding that "insurers generally remain unwilling to offer NBCR coverage because of uncertainties about the risk and the potential for catastrophic losses."[21] In the past, legislation would have provided for differential treatment of NBCR attacks under TRIA, but such legislation has not been enacted (see, e.g., H.R. 4134 in the 109th Congress, H.R. 2761 in the 110th Congress, and H.R. 4871 in the 110th Congress).

In 2016, state insurance regulators introduced a new *Cyber Liability* line of insurance, raising questions as to whether coverage under this line would be covered under TRIA, or whether it would not be covered under the law's exclusion of "professional liability" insurance. The Treasury Department released guidance in December 2016 clarifying that "stand-alone cyber insurance policies reported under the 'Cyber Liability' line are included in the definition of 'property and casualty insurance' under TRIA."[22]

Despite Treasury's guidance, cyberterrorism coverage remains a particular concern among certain stakeholders. The Treasury Department devoted a specific section of the latest report on TRIA to cyber coverage, reporting that 50% of standalone cyberinsurance policies (based on premium value) included terrorism coverage. The take-up rate for those choosing cyber coverage that is embedded in policies covering additional perils was 54%. These rates are similar to, but slightly lower than, the 62% take-up rate for general terrorism coverage found across all TRIA-eligible lines.[23]

Background on Terrorism Insurance

Insurability of Terrorism Risk

Stripped to its most basic elements, insurance is a fairly straightforward operation. An insurer agrees to assume an indefinite future risk in exchange for a definite current premium. The insurer pools a large number of risks such that, at any given point in time, the ongoing losses will not be larger than the current premiums being paid, plus the residual amount of past premiums that the insurer retains and invests, plus, in a last resort, any borrowing against future profits if this is possible. For the insurer to operate successfully and avoid failure, it is critical to accurately estimate the probability of a loss and the severity of that loss so that a sufficient premium can be charged. Insurers generally depend upon huge databases of

[20] The primary exception to this is workers' compensation insurance, which is required by most state laws to cover all sources of injury to workers.

[21] U.S. Government Accountability Office (GAO), *TERRORISM INSURANCE: Status of Coverage Availability for Attacks Involving Nuclear, Biological, Chemical, or Radiological Weapons*, GAO-09-39, December 12, 2008, at http://gao.gov/products/GAO-09-39.

[22] Department of the Treasury, "Guidance Concerning Stand-Alone Cyber Liability Insurance Policies Under the Terrorism Risk Insurance Program," 81 *Federal Register* 95313, December 27, 2016.

[23] Department of the Treasury, Federal Insurance Office (FIO), *Report on the Effectiveness of the Terrorism Risk Insurance Program*, June 2018, p. 55.

past loss information in setting these rates. Everyday occurrences, such as automobile accidents or natural deaths, can be estimated with great accuracy. Extraordinary events, such as large hurricanes, are more difficult, but insurers have many years of weather data, coupled with sophisticated computer models, with which to make predictions.

Many see terrorism risk as fundamentally different from other risks, and thus it is often perceived as uninsurable by the private insurance market without government support for the most catastrophic risk. The argument that catastrophic terrorism risk is uninsurable typically focuses on lack of public data about both the probability and severity of terrorist acts. The reason for the lack of historical data is generally seen as a good thing—few terrorist attacks are attempted and fewer have succeeded. Nevertheless, the insurer needs some type of measurable data to determine which terrorism risks it can take on without putting the company at risk of failure. As a replacement for large amounts of historical data, insurers turn to various forms of terrorism models similar to those used to assess future hurricane losses. Even the best model, however, can only partly replace good data, and terrorism models are still relatively new compared with hurricane models.

One prominent insurance textbook identifies four ideal elements of an insurable risk: (1) a sufficiently large number of insureds to make losses reasonably predictable; (2) losses must be definite and measurable; (3) losses must be fortuitous or accidental; and (4) losses must not be catastrophic (i.e., it must be unlikely to produce losses to a large percentage of the risks at the same time).[24] Terrorism risk in the United States would appear to not meet the first criterion, as terrorism losses have not proved predictable over time.[25] Losses to terrorism, when they occur, are generally definite and measurable, so terrorism risk could pass under criterion two. Such risk, however, also likely does not meet the third criterion due to the malevolent human actors behind terrorist attacks, whose motives, means, and targets of attack are constantly in flux. Whether it meets the fourth criterion is largely decided by the underwriting actions of insurers themselves (i.e., whether the insurers insure a large number of risks in a single geographic area that would be affected by a terrorist strike). Insurers generally have sought to limit their exposures in particular geographic locations with a conceptually higher risk for terrorist attacks, making terrorism insurance more difficult to find in those areas.

Terrorism risk post-2001 is not the first time the United States has faced a risk perceived as uninsurable in private markets that Congress chooses to address through government action. During World War II, for example, Congress created a "war damage" insurance program, and it expanded a program insuring against aviation war risk following September 11, 2001. Since 1968, the National Flood Insurance Program has covered most of the insured flooding losses in the United States.[26]

The closest previous analog to the situation with terrorism risk may be the federal riot reinsurance program created as part of the Housing and Urban Development Act of 1968.[27] Following large-scale riots

[24] Emmett J. Vaughan and Therese Vaughan, *Fundamentals of Risk and Insurance* (Hoboken, NJ: John Wiley & Sons, 2003), p. 41.

[25] Although the U.S. experience with terrorism is relatively limited, other countries have dealt with the issue more extensively and have developed their own responses to the challenges presented by terrorism risk. Spain, which has seen significant terrorist activity by Basque separatist movements, insures against acts of terrorism via a broader government-owned reinsurer that has provided coverage for catastrophes since 1954. The United Kingdom, responding to the Irish Republican Army attacks in the 1980s, created Pool Re, a privately owned mutual insurance company with government backing, specifically to insure terrorism risk. In the aftermath of the September 11, 2001, attacks, the UK greatly expanded Pool Re, and Germany created a private insurer with government backing to offer terrorism insurance policies. Canada specifically considered, and rejected, creating a government program following September 11, 2001. For more information on other countries' programs addressing terrorism risk, see GAO, *Terrorism Risk Insurance: Comparison of Selected Programs in the United States and Foreign Countries*, GAO-16-316, April 12, 2016, at https://www.gao.gov/products/GAO-16-316.

[26] For more information, see CRS Report R44593, *Introduction to the National Flood Insurance Program (NFIP)*, by Diane P. Horn and Baird Webel.

[27] P.L. 90-448; 82 Stat. 476.

in American cities in the late 1960s, insurers generally pulled back from insuring in those markets, either adding policy exclusions to limit their exposure to damage from riots or ceasing to sell property damage insurance altogether. The federal riot reinsurance program offered reinsurance contracts similar to commercial excess reinsurance. The government agreed to cover some percentage of an insurance company's losses above a certain deductible in exchange for a premium paid by that insurance company. Private reinsurers eventually returned to the market, and the federal riot reinsurance program was terminated in 1985.

The Terrorism Insurance Market Post-9/11 and Pre-TRIA

The September 2001 terrorist attacks, and the resulting billions of dollars in insured losses, caused significant upheaval in the insurance market. Even before the attacks, the insurance market was showing signs of a cyclical "hardening" of the market in which prices typically rise and availability is somewhat limited. The unexpectedly large losses caused by terrorist acts exacerbated this trend, especially with respect to the commercial lines of insurance most at risk for terrorism losses. Post-September 11, insurers and reinsurers started including substantial surcharges for terrorism risk, or, more commonly, they excluded coverage for terrorist attacks altogether. Reinsurers could make such rapid adjustments because reinsurance contracts and rates are generally unregulated. Primary insurance contracts and rates are more closely regulated by the individual states, and the exclusion of terrorism coverage for the individual insurance purchaser required regulatory approval at the state level in most cases. States acted fairly quickly, and, by early 2002, 45 states had approved insurance policy language prepared by the Insurance Services Office, Inc. (ISO, an insurance consulting firm), excluding terrorism damage in standard commercial policies.[28]

The lack of readily available terrorism insurance caused fears of a larger economic impact, particularly on the real estate market. In most cases, lenders prefer or require that a borrower maintain insurance coverage on a property. Lack of terrorism insurance coverage could lead to defaults on existing loans and a downturn in future lending, causing economic ripple effects as buildings are not built and construction workers remain idle.

The 14-month period after the September 2001 terrorist attacks and before the November 2002 passage of TRIA provides some insight into the effects of a lack of terrorism insurance. Some examples in September 2002 include the Real Estate Roundtable releasing a survey finding that "$15.5 billion of real estate projects in 17 states were stalled or cancelled because of a continuing scarcity of terrorism insurance"[29] and Moody's Investors Service downgrading $4.5 billion in commercial mortgage-backed securities.[30] This picture, however, was not uniform. For example, in July 2002, *The Wall Street Journal* reported that "despite concerns over landlords' ability to get terrorism insurance, trophy properties were in demand."[31] CBO concluded in 2005 that "[TRIA] appears to have had little measurable effect on office construction, employment in the construction industry, or the volume of commercial construction loans made by large commercial banks," but CBO also noted that a variety of economic factors at the time "could be masking positive macroeconomic effects of TRIA."[32]

[28] Jeff Woodward, "The ISO Terrorism Exclusions: Background and Analysis," *IRMI Insights*, February 2002, at http://www.irmi.com/expert/articles/2002/woodward02.aspx.

[29] The Real Estate Roundtable, "Terror Insurance Drag on Real Estate Still Climbing," *Roundtable Weekly*, September 19, 2003.

[30] "Moody's Downgrades Securities on Lack of Terrorism Insurance," *Wall Street Journal*, September 30, 2002, p. C14.

[31] Ray A. Smith, "Office-Building Demand Rises Despite Vacancies," *Wall Street Journal*, July 24, 2002, p. B6.

[32] Congressional Budget Office, *Federal Terrorism Reinsurance: An Update*, January 2005, pp. 10-11, at http://www.cbo.gov/publication/16210.

After TRIA

TRIA's "make available" provisions addressed the availability problem in the terrorism insurance market, as insurers were required by law to offer commercial terrorism coverage. However, significant uncertainty existed as to how businesses would react, because there was no general requirement to purchase terrorism coverage and the pricing of terrorism coverage was initially high.[33] Analyzing the terrorism insurance market in the aftermath of TRIA is challenging as well because there was no consistent regulatory reporting by insurers until P.L. 114-1 required detailed reporting, which Treasury began in 2016. Before this time, data on terrorism insurance typically stemmed from insurance industry surveys or rating bureaus. In examining the terrorism insurance market since TRIA, it is also important to note that no terrorist attacks have occurred that reached TRIA thresholds, thus property and casualty insurance has not made any large-scale payouts for terrorism damages.

The initial consumer reaction to the terrorism coverage offers was relatively subdued. Marsh, Inc., a large insurance broker, reported that 27% of its clients bought terrorism insurance in 2003. This take-up rate, however, climbed relatively quickly to 49% in 2004 and 58% in 2005. Marsh reported that, since 2005, the overall take-up rate has remained near 60%, with Marsh reporting a rate of 62% in 2017.[34] The Treasury reports based on industry data calls have found similar or higher take-up rates. For 2017, Treasury found that the take-up rate based on premium volumes was 62%, whereas based on policy counts, the rate was 78%.[35]

The price for terrorism insurance has appeared to decline over time, although the price level reported may not always be comparable between sources. The 2013 report by the President's Working Group on Financial Markets, based on survey data by insurance broker Aon, showed a high of more than 7% for the median terrorism premium as a percentage of the total property premium in 2003, with a generally downward trend, and more recent values around 3%.[36] The trend may be downward, but there has been variability, particularly across industries. For example, Marsh reported rates in 2009 as high as 24% of the property premium for financial institutions and as low as 2% in the food and beverage industry.[37] In the 2013 Marsh report, this variability was lower, as 2012 rates varied from 7% in the transportation industry and the hospitality and gaming industry to 1% in the energy and mining industry.[38] In 2017, Marsh found rates varying from 10% in hospitality and gaming to 2% in the energy and mining and construction industries. The 2018 Treasury report, based on lines of insurance, not on industry category, found premiums varying from 6.1% in excess workers' compensation to 1.4% in ocean marine in 2017.[39]

Treasury found that the total premium amount paid for terrorism coverage in 2017 was approximately $3.65 billion, or 1.75%, of the $209.15 billion in total premiums for TRIA-eligible lines of insurance.[40] Since the passage of TRIA, Treasury estimates that a total of approximately $38 billion was earned for

[33] Although there is no requirement in federal law to purchase terrorism coverage, businesses may be required by state law to purchase the coverage. This is particularly the case in workers' compensation insurance. Market forces, such as requirements for commercial loans, may also compel businesses to purchase terrorism coverage.

[34] Marsh, Inc., *2018 Terrorism Risk Insurance Report*, April 2018, p. 1.

[35] FIO, *Report on the Effectiveness of the Terrorism Risk Insurance Program*, June 2018, p. 30.

[36] President's Working Group on Financial Markets, *The Long-Term Availability and Affordability of Insurance for Terrorism Risk*, April 2014, p. 26.

[37] Marsh, Inc., *The Marsh Report: Terrorism Risk Insurance 2010*, p. 14.

[38] Marsh, Inc., *2013 Terrorism Risk Insurance Report*, May 2013, p. 12.

[39] FIO, *Report on the Effectiveness of the Terrorism Risk Insurance Program*, June 2018, p. 20.

[40] FIO, *Report on the Effectiveness of the Terrorism Risk Insurance Program*, June 2018, pp. 72-74. Calculations by CRS.

terrorism coverage by nonrelated insurers, with another $7.4 billion earned by captive insurers (which are insurers who are owned by the insureds).

In general, insurers' capacity to bear terrorism risk has increased over the life of the TRIA program. The combined policyholder surplus among all U.S. property and casualty insurers was $686.9 billion at the end of 2017 compared with $408.6 billion (inflation adjusted) at the start of 2002.[41] This $686.9 billion has been bolstered by the estimated $38 billion in premiums paid for terrorism coverage over the years without significant claims payments. The policyholder surplus, however, backs all property and casualty insurance policies in the United States and is subject to depletion in a wide variety of events. For example, extreme weather losses could particularly draw capital away from the terrorism insurance market, because events such as hurricanes share some characteristics—low frequency and the possibility of catastrophic levels of loss—with terrorism risk.

Evolution of Terrorism Risk Insurance Laws

Table 1 presents a side-by-side comparison of selected provisions from the original TRIA law, along with the reauthorizing laws of 2005, 2007, and 2015.

[41] AM Best, *Best's Aggregates & Averages, Property-Casualty*, 2002 Edition, p. 2; and AM Best, *Best's Aggregates & Averages, Property-Casualty*, 2018 Edition, p. 2. Inflation adjustment from the Bureau of Labor Statistics' CPI inflation calculator at https://data.bls.gov/cgi-bin/cpicalc.pl. Actual 2002 figure is $293.5 billion.

Table 1. Side-by-Side of Enacted Terrorism Risk Insurance Laws

(selected provisions)

Provision	Original 2002 Law 15 U.S.C. 6701 Note (P.L. 107-297)	2005 Reauthorization P.L. 109-144	2007 Reauthorization P.L. 110-160	2015 Reauthorization P.L. 114-1
Title	Terrorism Risk Insurance Act of 2002	Terrorism Risk Insurance Extension Act of 2005	Terrorism Risk Insurance Program Reauthorization Act of 2007	Terrorism Risk Insurance Program Reauthorization Act of 2015
Expiration Date	December 31, 2005 (§108(a))	December 31, 2007 (§2)	December 31, 2014 (§3(a))	December 31, 2020 (§101)
"Act of Terrorism" Definition	For an act of terrorism to be covered under TRIA, it must be a violent act committed on behalf of a foreign person or interest as part of an effort to coerce the U.S. civilian population or influence U.S. government policy. It must have resulted in damage within the United States or to a U.S. airliner or mission abroad. Terrorist act is to be certified by the Secretary of the Treasury in concurrence with the Attorney General and Secretary of State. (§102(1)(A))	No Change	Removed requirement that a covered act of terrorism be committed on behalf of a foreign person or interest (thus expanding coverage to domestic terrorism). (§2)	Removed Secretary of State from certification process and inserted Secretary of Homeland Security. (§105)
Limitation on Act of Terrorism Certification in Case of War	Terrorist act would not be covered in the event of a war, except for workers' compensation insurance. (§102(1)(B)(I))	No Change	No Change	No Change
Minimum Damage To Be Certified	Terrorist act must cause more than $5 million in property and casualty insurance losses to be certified. (§102(1)(B)(ii))	No Change	No Change	No Change

Provision	Original 2002 Law 15 U.S.C. 6701 Note (P.L. 107-297)	2005 Reauthorization P.L. 109-144	2007 Reauthorization P.L. 110-160	2015 Reauthorization P.L. 114-1
Aggregate Industry Loss Requirement/Program Trigger	No Provision	Created a "program trigger" that would prevent coverage under the program unless "aggregate industry losses resulting from such certified act of terrorism" exceed $50 million in 2006 and $100 million for 2007. (§6)	No Change. Program trigger remained at $100 million until 2014. (§3(c))	Program trigger increased $20 million per year until it reaches $200 million in 2020. (§102)
Insurer Deductible	7% of earned premium for 2003, 10% of earned premium for 2004, 15% of earned premium for 2005. (§102(7))	Raised deductible to 17.5% for 2006 and 20% for 2007. (§3)	No Change. Deductible remained at 20% until 2014. (§3(c))	No Change. Deductible remained at 20% for each calendar year of the program. (§106)
Covered Lines of Insurance	Commercial property and casualty insurance, including excess insurance, workers' compensation, and surety but excluding crop insurance, private mortgage insurance, title insurance, financial guaranty insurance, medical malpractice insurance, health or life insurance, flood insurance, or reinsurance. (§102(12))	Excluded commercial auto, burglary and theft, professional liability (except for directors and officers liability), and farm owners multiple peril from coverage. (§3)	No Change	No Change
Mandatory Availability	Every insurer must make available terrorism coverage that does not differ materially from coverage applicable to losses other than terrorism. (§103(c))	No Change. Mandatory availability extended through 2007. (§2(b))	No Change. Mandatory availability extended through 2014. (§3(c))	No Change. Mandatory availability in effect for each calendar year of the program. (§106)
Insured Loss Shared Compensation	Federal share of losses will be 90% for insured losses that exceed the applicable insurer deductible. (§103(e))	Reduced federal share of losses to 85% for 2007. (§4)	No Change. Federal share remained at 85% through 2014.	Reduced federal share one percentage point per year until it reaches 80%. (§102)

Provision	Original 2002 Law 15 U.S.C. 6701 Note (P.L. 107-297)	2005 Reauthorization P.L. 109-144	2007 Reauthorization P.L. 110-160	2015 Reauthorization P.L. 114-1
Cap on Annual Liability	Federal share of compensation paid under the program will not exceed $100 billion and insurers are not liable for any portion of losses that exceed $100 billion unless Congress acts otherwise to cover these losses. (§103(e))	No Change	Removed the possibility that a future Congress could require insurers to cover some share of losses above $100 billion if the insurer has met its individual deductible. Requires insurers to clearly disclose this to policyholders. (§4(a) and §4(d))	No Change
Payment Procedures if Losses Exceed $100 billion	After notice by the Secretary of the Treasury, Congress determines the procedures for payments if losses exceed $100 billion. (§103(e)(3))	No Change	Required Secretary of the Treasury to publish regulations within 240 days of passage regarding payments if losses exceed $100 billion. (§4(c))	No Change
Aggregate Retention Amount Maximum	$10 billion for 2002-2003, $12.5 billion for 2004, $15 billion for 2005 (§103(6))	Raised amount to $25 billion for 2006 and $27.5 billion for 2007. (§5)	No Change. Aggregate retention remained at $27.5 billion through 2014.	Raises amount $2 billion per year until it reaches $37.5 billion. Beginning in 2020, sets the amount equal to annual average of the sum of insurer deductibles for previous three years. (§104)

Mandatory Recoupment of Federal Share	If insurer losses are less than the aggregate retention amount, a mandatory recoupment of the federal share of the loss will be imposed. If insurer losses are over the aggregate retention amount, such recoupment is at the discretion of the Secretary of the Treasury. (§103(e)(7))	No Change	Increases total recoupment amount to be collected by the premium surcharges to 133% of the previously defined mandatory recoupment amount. Full mandatory recoupment must occur by September 30, 2017. (§4(e)(1))	Increases total recoupment amount to be collected by the premium surcharges to 140% of the previously defined mandatory recoupment amount. Full mandatory recoupment must occur by September 30, 2024. (§104)
Recoupment Surcharge	Surcharge is limited to 3% of property-casualty insurance premium and may be adjusted by the Secretary to take into account the economic impact of the surcharge on urban commercial centers, the differential risk factors related to rural areas and smaller commercial centers, and the various exposures to terrorism risk across lines of insurance. (§103(e)(8))	No Change	Removed 3% limit for mandatory surcharge. (§4(e)(2)(A))	No Change

Source: The Congressional Research Service using public laws obtained from the Government Publishing Office through http://www.congress.gov.

Notes: Section numbers for the initial TRIA law are as codified in 15 U.S.C. §6701 note. Section numbers for P.L. 109-144, P.L. 110-160, and P.L. 114-1 are from the legislation as enacted.

RESPONSES TO WRITTEN QUESTIONS OF SENATOR MENENDEZ FROM TARIQUE NAGEER

Q.1. TRIA reauthorization is particularly important to my home State of New Jersey, where there is a high population density, important cultural centers and landmarks, and major infrastructure, including ports, rail, and highways.

What are the consequences of letting TRIA expire for high target States like New Jersey?

A.1. If TRIA is allowed to expire or is substantially changed, and the mandatory make-available provision is removed, insurers would not be obliged to offer terrorism coverage. Additionally, the TRIA premium charged by insurers without the backstop in place is likely to be considerably higher. The United States is the world's largest buyer of terrorism insurance, and U.S.-based organizations continue to purchase coverage at a high rate. In 2018, the take-up rate for TRIPRA coverage embedded in U.S. property policies was 62 percent (see Figure 4). Take-up rates have remained close to 60 percent over the last several years.

Potentially, property reinsurance capacity and competition could positively influence the supply of terrorism capacity; however, available coverage and limits would not be as readily available in certain cities. In particular, this may impact companies that have substantial property exposures in central business districts and where reinsurance capacity would be diminished and insufficient to meet insurers' demands.

Additionally, some industries are susceptible to certain insurance requirements, such as mortgage lender requirements with real estate companies. Within TRIA's current structure, the limits available for terrorism insurance are typically sufficient for real estate companies to meet their risk transfer and lender requirement needs. A change in the Act's structure could potentially cause a gap in demand and availability. This susceptibility is not limited to "central business districts" or major cities.

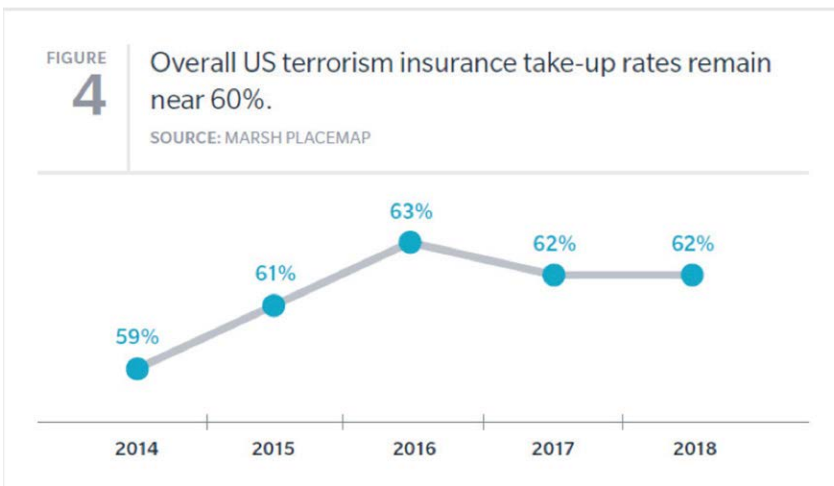
The main alternative for a property terrorism risk transfer mechanism if TRIA is not reauthorized would be the standalone terrorism insurance market. As standalone capacity is finite, the cost of this capacity likely would be considerably higher in areas or cities where demand is high, such as major metropolitan areas, central business districts, iconic buildings, ports/airports and even "soft targets" such as shopping malls.

This market dynamic varies considerably by location. In certain high-risk cities—such as New York, San Francisco, Chicago, Houston, Atlanta or Washington, D.C.—the cost of standalone terrorism insurance capacity can be multiples of the current pricing for TRIA embedded as part of property programs.

Organizations that employ captives also are likely to be affected in the event TRIA is allowed to expire or is significantly changed. Captives are widely used to supplement what is available in the commercial market, and, in some cases captive insurers are the only available option for certain layers and/or perils. This is most common in areas of higher perceived risk, such as for property or employee-related coverages in major cities. Generally speaking, since captives are best suited to primary operating layers, or as a mechanism for accessing risk transfer solutions, it is very likely that, absent TRIA, captive utilization for terrorism coverage would change significantly.

In addition to property insurance, other coverage lines likely will be impacted if TRIA expires or is significantly changed, particularly workers' compensation insurance, as workers' compensation insurers are not permitted to exclude terrorism from their policies. Insurers are concerned about potential aggregation of risk, which may impact the availability of workers' compensation insurance should TRIA materially change or expire. Where these insurers are also offering other lines of insurance, such as property, the combined aggregate exposure likely will further limit their ability or willingness to offer substantial property limits.

Likely impacts that the absence of or a serious modification of TRIA could have on the workers' compensation market are in the areas of pricing and capacity. It is expected that the reinsurance market would likely increase pricing because of the increased potential exposure. This would, in turn, have a trickle-down effect on the primary workers' compensation marketplace. Further, the ability of insurers to use reinsurance capacity to manage their maximum tolerable losses could prove more difficult, especially for the terrorism perils of NBCR events. This could significantly alter carriers' risk appetites and their willingness to offer coverage to employers with large employee accumulations.



Q.2. What are consequences of letting TRIA expire for communities around the country that are home to critical infrastructure such as rail lines, power plants, highways, airports, or pipelines? If these investments become more costly, doesn't that have a nationally adverse impact?

A.2. There is insufficient standalone terrorism capacity to cost effectively replace TRIA. This will result in increased terrorism insurance costs and insurance market dislocation for risks in the commercial real estate sector. This could result in negative economic impact for industries affected by this dislocation.

The main alternative for a property terrorism risk transfer mechanism if TRIA is not reauthorized would be the standalone terrorism insurance market. Since standalone capacity is finite, the cost of this capacity likely would be considerably higher in areas or cities where demand is high, such as major metropolitan areas, central business districts, iconic buildings, ports/airports for example.

The percentage of companies that purchased terrorism insurance—and the amount they spent on terrorism insurance as a portion of their overall premiums—varied significantly by industry in 2018. Education institutions, media organizations, financial institutions, and real estate companies were the most frequent buyers while transportation and hospitality and gaming companies spent the most on terrorism as a percentage of their total premium spend due to their perceived vulnerability (see Figure 5).

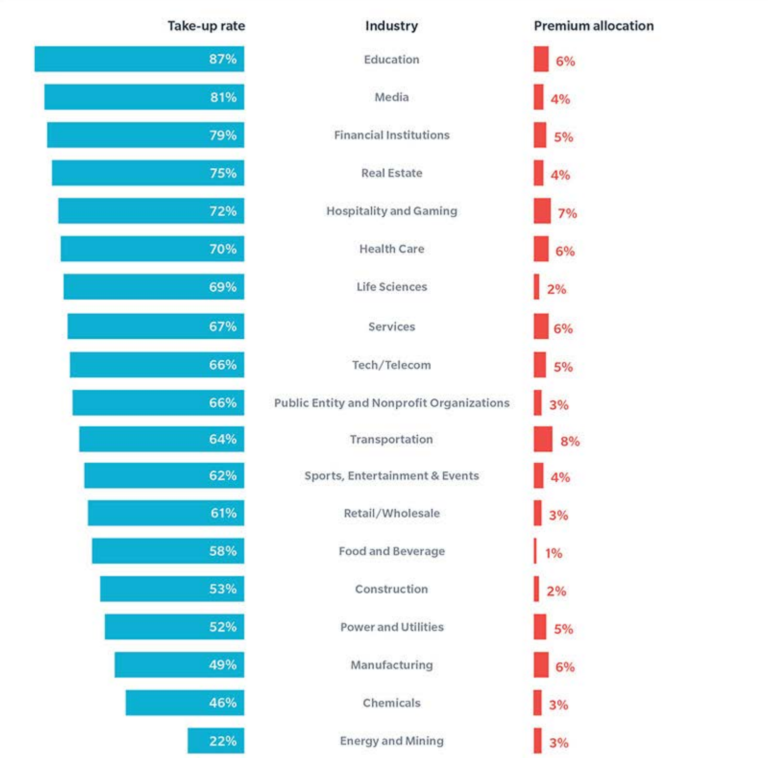


FIGURE 5 Education entities bought terrorism insurance most frequently in 2018; transportation companies allocated the largest share of overall premium.

SOURCE: MARSH PLACEMAP

Global dedicated reinsurance capital is estimated to be $440 billion; dedicated reinsurance capital in North America is estimated to be between $120 billion and $140 billion. Reinsurance capacity for terrorism, however, is dependent on a reinsurer's preference, appetite, expertise and aggregate constraints.

It is not unforeseeable that changes to the backstop could result in a withdrawal of smaller carriers away from the terrorism segment, while larger carriers may or may not continue to write—and absorb more—risk throughout the cycle of market dislocation. This would have an impact on the marketplace with fewer options available for small businesses, potentially higher insurance expenses and less available for growth and investments.

RESPONSES TO WRITTEN QUESTIONS OF SENATOR WARREN FROM TARIQUE NAGEER

Q.1. Certain mass shootings, such as those that occurred in Las Vegas, NV, Sutherland Springs, TX, and Newtown, CT, have not been certified by the Treasury Secretary as acts of terrorism. Therefore, these incidents have not been regarded as qualifying events for terrorism risk insurance, in part, because those attacks did not meet current law's requirement of being "part of an effort to coerce the civilian population of the United States or to influence the policy or affect the conduct of the United States Government by coercion." Given the high frequency of mass shootings in the United States, is there a public policy interest in certifying certain mass shootings committed by individuals as qualifying events for terrorism risk insurance purposes, even if they are not demonstrably intended to coerce Americans or influence U.S. Government policy? Please explain why or why not.

A.1. Unfortunately, mass shootings are an important topic and, as such, there are policy initiatives underway to address them. The private insurance market has developed forms of coverage to respond to active assailant threats—helping organizations and individuals victimized by such attacks to recover and mitigate their future risk. This insurance, active assailant coverage, complements the general liability and property coverage that most businesses already purchase, offering another layer of protection against the threat of assailants. Various active assailant insurance products available via commercial insurers typically offer affirmative coverage that is triggered by premediated malicious physical attacks by active assailants who are physically present and armed. These policies can typically offer:

A. Property damage, business interruption, and extra expense coverage;
B. Legal liability coverage;
C. Nonphysical damage coverage;
D. Loss of revenue and denial of access coverage;
E. Reimbursement for costs for public relations consulting, crisis management, medical services, counseling and/or psychiatric care, hiring of additional staff and added security.

Beyond purchasing insurance coverage, it's vital that businesses carefully consider their potential risk and actively engage in prevention and response preparedness activities to help reduce the potential loss of life, injuries, and damage to their and others' property. The Department of Homeland Security offers various active shooter preparation guidance on its website: *https://www.dhs.gov/cisa/active-shooter-preparedness.*

Please see Addendum 1 for additional information on dedicated coverage for active assailant events.

Q.2. According to Congressional Research Service (CRS) specialist Baird Webel's written testimony, the current terrorism risk insurance program "protect[s] consumers—by requiring insurers that offer [Terrorism Risk Insurance Act]-covered lines of insurance to make terrorism insurance available prospectively to their commercial policyholders." Are there other actions that Congress or Federal agencies could take that would enhance protections for consumers in the terrorism risk insurance market?

A.2. Terrorism insurance pools should continue to evolve their scope and scale to provide the requisite response and stability for companies to operate securely.

Certain market segments are required to provide coverage (*e.g.,* workers' compensation, unlimited, and for all terror perils) versus having greater flexibility (*e.g.,* property terrorism, particularly nuclear, biological, chemical and radiological terrorism coverage, where it can be excluded if the insured does not elect to purchase the coverage).

It would be beneficial to investigate requiring elements of nuclear, biological, chemical and radiological terrorism coverage that would allow the Federal Government to reduce its exposure to uninsured losses resulting from a NBCR loss scenario and further develop the private market appetite.

Any actions should be reviewed with due consideration to avoid insurers pulling out of specific coverage lines, which would thus have a negative effect on policyholders due to reduced availability.

Q.3. According to CRS specialist Baird Webel's written testimony, "Federal law does not limit what insurers can charge for terrorism risk insurance, although State regulators typically have the authority under State law to modify excessive, inadequate, or unfairly discriminatory rates." While one of the original goals of the Terrorism Risk Insurance Program is to preserve State regulation of insurance, is there a public policy interest in developing a Federal limit on what insurers can charge for terrorism risk insurance, or is the current State-centric framework sufficient to prevent abusive practices in the market?

A.3. In the current marketplace, terrorism price competition among insurers is driven in part by modeling the exposure and reviewing correlated risks across multiple terrorism exposed lines of business (*e.g.,* those insuring both property and workers' compensation for the same risk(s)).

Insurers measure their accumulations of risk and price their business based on the physical address level of data and differentiates those insured(s) with different risk profiles within each covered line of business.

The action to minimize the negative market impact arising from the uncertainty around TRIA's future and serve the marketplace well would be to provide clear guidance on how a reauthorization might look, as soon as possible. Subject policies with effective dates on (and after) January 1, 2020, that are issued with annual terms, are creating a potential (and unknown) increased net exposure to insurers post the scheduled December 31, 2020, expiration of TRIA.

The uncertainty with TRIA will cause insurance carriers to consider issuing unilateral policy endorsement provisions that will allow them to increase the price for terrorism coverage mid-term once it is known how TRIA will look going forward (either materially changed or nonrenewed) post its expiration. This effectively pushes the uncertainty in the market to the commercial insurance buyers and employers of all sizes. Further, it leaves open for interpretation the definition of "materially changed" and eliminates the ability for the insurance buyer to maintain coverage and cost certainty.

Q.4. On December 27, 2016, the Treasury Department issued "guidance regarding how insurance recently classified as 'Cyber Liability' for purposes of reporting premiums and losses to State insurance regulators will be treated under TRIA and Treasury's regulations for the Program (Program regulations)." That guidance "confirms that stand-alone cyber insurance policies reported under the 'Cyber Liability' line are included in the definition of 'property and casualty insurance' under TRIA and are thus subject to the disclosure requirements and other requirements in TRIA and the Program regulations[.] Furthermore, that guidance noted, "Cyber risk insurance remains an evolving insurance market, both in terms of product development and regulatory oversight." Similarly, cyberspace remains a consistently evolving threat environment. At this time, would you recommend any updates to the Treasury Department's guidance on cyber insurance policies? Please explain why or why not.

A.4. TRIA serves an essential role to the insurance market by injecting stability into several terrorism-related lines of insurance. With regard to cybersecurity, terrorism remains a present and growing threat vector. That risk is typically covered under cyber insurance policies, but may also impact other lines of coverage, including property or workers' compensation.

One hurdle for using TRIA to address acts of cyberterrorism could be the challenge of attribution. "Attribution of attacks can be difficult. This is usually dependent on technical means of attribution. In malicious cyber actions, spoofing or obfuscation of an identity most often occurs. It is not easy to know who conducts malicious cyber activity."[1]

Congress should consider whether the Secretary of the Treasury can declare a certified act of terrorism without certain attribution. Potentially, the Secretary could have the flexibility to certify an act of terrorism based on factors such as the objective of the attack and the impact of the attack.

Guidance on the Secretary's flexibility could potential be addressed in the report language that accompanies the passage of a reauthorization of TRIPRA.

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[1] "Strategies for Resolving the Cyber Attribution Challenge," U.S. Air Force Research Institute (accessed at *https://media.defense.gov/2017/May/11/2001745613/-1/-1/0/CPP__0001__yannakogeorgos__cyber__ttribution__challenge.pdf).*

ADDENDUM 1

PROPERTY PRACTICE

Dedicated Coverage for Active Assailant Events

High-profile mass shootings over the last decade in various public and private settings — from a Las Vegas music festival to a South Florida high school — and various attacks involving vehicles have often been carried out with the sole intent of instilling public fear while causing as much loss of life as possible. Although traditional forms of insurance coverage can provide a measure of protection for businesses and employees that are targeted in such attacks, their language can be ambiguous — and may have sizable gaps.

To address any potential coverage gaps, several leading insurers have developed new forms of coverage dedicated to responding to active assailant threats, helping organizations that are victims of such attacks to mitigate their risk and recover following them.

A Growing Threat

Mass shootings in schools, private businesses, and public settings have long threatened the safety and security of people and organizations across the US. Many of these shootings are characterized as active shooter events, which are defined by the Department of Homeland Security (DHS) as being perpetrated by individuals "actively engaged in killing or attempting to kill people in a confined and populated area." In 2017, an active shooter event occurred, on average, every 12 days, according to FBI data.

Beyond active shooter events, the means of attack used by individuals and organizations engaged in terrorism have shifted. While past attacks have been

WHO IT'S FOR

- Businesses concerned about active assailant incidents, including active shooters and vehicle-based terrorist attacks.

WHAT YOU GET

A layer of insurance protection for active assailant threats beyond what is traditionally afforded via property and general liability policies, including:

- Business interruption coverage.
- Non-physical damage time element coverage.
- Loss of attraction and denial of access coverage.
- Reimbursement for costs for public relations consulting, crisis management, medical services, counseling and/or psychiatric care, hiring of additional staff, and added security.
- A buy-down option for lower retentions.
- Affirmative coverage.

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carried out primarily by specific groups against perceived high-value/high-profile targets, many recent attacks have come against soft targets and been perpetrated by "lone wolves" and small groups with no direct connection to known terrorist organizations. Weapons of choice now include vehicles, which were used in high-profile attacks in 2017 in Barcelona and New York that killed more than 20 people and injured more than 100.

Coverage Highlights

Active assailant coverage — also known as active shooter coverage or deadly weapons coverage — developed by commercial insurers can help organizations address these ever-present risks. Offering a combination of property and casualty coverage, active assailant coverage can complement the general liability and property coverage that most businesses already purchase, offering another layer of protection against the threat of assailants.

Various active assailant insurance products available via commercial insurers typically offer affirmative coverage that is triggered by premediated malicious physical attacks by active assailants who are physically present and armed. These policies can typically offer:

- Property damage, business interruption, and extra expense coverage.
- Legal liability coverage.
- Non-physical damage coverage.
- Loss of attraction and denial of access coverage.
- Reimbursement for costs for public relations consulting, crisis management, medical services, counseling and/or psychiatric care, hiring of additional staff, and added security.
- Limits of up to $100 million.
- No exclusions for vehicles, attacks by employees, and terrorism.

Preparation and Response Planning

Beyond purchasing insurance coverage, it's vital that businesses carefully consider their potential risk and actively engage in prevention and response preparedness activities to help reduce the potential loss of life, injuries, and damage to their and others' property. In addition to the coverage afforded by the policy, active assailant products can help in this effort. For example, policies typically cover the costs of advisory services to help businesses assess their potential risk, conduct on-site seminars to train employees, and develop active shooter response plans.

WHY MARSH?

With extensive property and casualty insurance and industry knowledge, claims advocacy experience, strong insurance market relationships, and unmatched consulting expertise, Marsh has the skills and know-how to help you address active assailant risks. Our specialized property and casualty colleagues can help you evaluate available active assailant coverage options and build a program that fits your needs and can respond as needed. Our team of risk consultants can also help you develop, test, and refine crisis management response and business continuity plans ahead of a potential attack. And in the event of an attack, we can help execute critical tasks, including providing humanitarian support to employees and others, communicating with the public, conducting post-incident reviews, and managing insurance claims.

For more information, visit marsh.com, contact your Marsh representative, or contact:

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RESPONSES TO WRITTEN QUESTIONS OF SENATOR JONES FROM TARIQUE NAGEER

Q.1. Cyber attacks are gaining traction as a preferred method to terrorize individuals and organizations. In 2016, the Treasury Department issued guidance that clarified cyberterrorism is included in TRIA.

- Some believe that Russia interference in the 2016 Presidential election by manipulating voters with fake social media accounts is considered cyberterrorism. This type of cyberterrorism has immeasurable consequences and affects Americans that would not even participate in TRIA.
- Additionally, the Port of Mobile keeps track of containers that are to be shipped across the country. The Port of Mobile is an important part of Alabama's economy. If an organization decided to pressure Alabama into particular policy positions by attacking their computer system it would have dramatic effects on business owners dependent on the Port to ship their merchandise.
- What cyberterrorism looks like and the effects on people is very different from physical terrorist attacks. How should TRIA adapt to the growing prevalence of cyber attacks that gives private insurance a backstop but also provides policy holders with protection?

A.1. In 2016, the U.S. Department of the Treasury responded to the growing risk of cyberterrorism by clarifying that losses incurred under cyber insurance policies would be eligible under TRIA. Accordingly, TRIA may already serve as a backstop for cyber insurance carriers in the event of a certified act of cyberterrorism. Moreover, acts of terrorism, including acts of cyberterrorism, may not qualify for TRIA because the impacts of those attacks fail to meet the statutory loss thresholds.

At this time, there is no basis to believe that TRIA should be altered to provide further support to the cyber insurance industry, or to support other covered lines of insurance for cyber perils. However, Congress may consider how systemic risks may arise from cyber attacks that do not qualify as acts of cyberterrorism, and how well the Nation is prepared to respond to such systemic attacks.

Q.2. Often TRIA is discussed with large cities in mind, but many smaller communities can be targets of terrorist activities. This is shown with the Charleston, South Carolina, church shooting when a white supremacist murdered nine people. Small communities like this are likely to receive insurance from local agents.

- Also, Alabama is home to two extremely popular football teams, University of Alabama and Auburn University. The Iron Bowl is an annual game between Alabama and Auburn and draws large crowds from each school. This could easily be a target for terrorist organizations.
- How would reforms to TRIA affect smaller communities, particularly their premiums and the extent of their coverage?

A.2. A change in the $200m industry loss may have an outsized impact on small carriers if:

A. A loss occurs in a region/facility with few other insured structures or employees in close proximity;

B. The carrier in question is liable for the majority insured loss, *i.e.,* this is not a subscription risk and is placed almost entirely with one market;

C. In a year with a "swarm" of small attacks, the insurer in question takes a loss from one or two small-to-moderate size losses, but the total damage to the U.S. property/casualty industry is not significant and fails to qualify for certification.

Small carriers could surmount this challenge by managing deployed limits and diversifying their footprints away from regions/locations of peak exposures. This could come at the cost of competitiveness or availability of capacity for policyholders and have a negative short-term impact on the carrier.

One way to mitigate the impact of these changes would be to phase in the aggregate increase over a defined period of time, *e.g.,* $25m increase per year for a decade. This would allow for more manageable budgeting and business planning, and mitigate market disruption.

Changing the company deductible, however, would likely have an even more pronounced impact, especially on the small insurers. For example, if the company deductible were to increase by 10 points to 30 percent, a majority of small-to-medium sized carriers who rely more on TRIA's existence, and whose program deductible represents the largest percentage of policyholder surplus, will have to re-strategize regarding the company's:

A. Defined per occurrence risk tolerance;

B. Reinsurance buying strategy;

C. Aggregate amount of limit deployed in the marketplace;

D. Pricing for terrorism risk;

E. Ratings agency scrutiny.

Ratings agency scrutiny is particularly important for small and mutual carriers. Carriers must submit annual assessments of their net-of-TRIPRA and reinsurance accumulations. An increase in the deductible mid-term could potentially lead to a gap in terrorism reinsurance coverage, and consequently, could lead to a failed stress test. If this were to occur, it may damage the firm's financial strength rating, and impede its ability to secure new business.

In 2017, nearly 800 U.S.-based carriers wrote $215 billion in TRIPRA-eligible premium, with a combined policyholder surplus (PHS) of $733 billion.

Considering the current 20 percent deductible requirement and PHS as a filter, Guy Carpenter's analysis concludes that small- to mid-size insurers could be substantially more vulnerable to the annual increases in the TRIPRA industry trigger and their overall net retentions as a percentage of PHS (see Table 1).

TABLE 1. **TRIPRA deductible statistics by policyholders surplus USD (000's)**

795 Carriers with aggregate PHS = $733B								
PHS Band	< 25M	25M to 50M	50M to 100M	100M to 300M	300M to 500M	500M to 1B	1B to 5B	>5B
Company Count	329	99	82	118	39	45	53	26
Average YE 2014 TRIPRA DEP	5,598	19,577	39,238	90,060	155,446	335,835	943,053	4,743,769
Average TRIPRA Deductible	1,120	3,915	7,848	18,012	31,089	67,167	188,611	948,754
Average Deductible as % PHS	13.47%	10.75%	11.05%	9.85%	7.70%	9.29%	9.51%	8.07%
Average assuming a $160M Terror Loss % PHS	4281.0%	462.3%	236.9%	96.4%	41.7%	23.6%	9.4%	1.7%
Average assuming a $200M Terror Loss % PHS	5351.3%	577.9%	296.2%	120.4%	52.1%	29.5%	11.8%	2.1%

Source: Guy Carpenter, SNL YE 2017 data

Insurers with $1 billion in surplus and relatively larger TRIPRA deductibles (over $200 million) tend to manage their conventional terrorism exposures and accumulations rather than be dependent on TRIPRA recoveries.

Insurers with less than $500 million in surplus and relatively more exposure to terrorism losses are more likely to fall under the widening "TRIPRA coverage gap" that exposes them to a loss scenario where TRIPRA may not be industry triggered, leaving private reinsurance as their only source of surplus protection.

It is not unforeseeable that changes to the backstop could result in a withdrawal of smaller carriers away from the terrorism segment, while larger carriers may or may not continue to write—and absorb more—risk throughout the cycle of market dislocation. This would have an impact on the marketplace with fewer options available for small businesses, potentially higher insurance expenses and less capital available for growth and investments.

If changes are considered, we would recommend gradually phasing in any increases in the deductible over a planned time horizon. This would mitigate short-term market disruptions and allow smaller companies time to adequately capitalize themselves to take on an increased share within the private market.

RESPONSES TO WRITTEN QUESTIONS OF SENATOR SINEMA FROM TARIQUE NAGEER

Q.1. What types of uncertainty will the insurance market and insured entities experience if Congress waits too long to consider reauthorization of the Terrorism Risk Insurance Act (TRIA)? How will that timing affect entities seeking coverage or renewal of coverage?

A.1. The uncertainty around the future of the Terrorism Risk Insurance Program Reauthorization Act (TRIPRA)—scheduled to expire on December 31, 2020—can significantly affect the property/casualty insurance industry.

If TRIPRA is not renewed by Congress, the property insurance industry will be left with no Federal backstop for losses from certified acts of terrorism. As policies with effective dates after December 31, 2019, may extend beyond the expiration date of the legislation, insurers must determine in advance how to deal with their terrorism exposures as of that date.

Property insurers may either accept the terrorism liability on all in-force policies on a fully net basis or place sunset clauses on policies written after December 31, 2020. Such a clause would cancel the terrorism coverage effective December 31, 2020, if legislation extending TRIPRA is not passed by Congress and signed by the President.

In addition to property insurance, other coverage lines likely will be impacted if TRIA expires or is significantly changed, particularly workers' compensation insurance, as workers' compensation insurers are not permitted to exclude terrorism from their policies. Insurers are concerned about potential aggregation of risk, which may impact the availability of workers' compensation insurance should TRIA materially change or expire. Where these insurers are also offering other lines of insurance, such as property, the combined aggregate exposure likely will further limit their ability or willingness to offer substantial property limits.

Likely impacts that the absence of or a serious modification of TRIA could have on the workers' compensation market are in the areas of pricing and capacity. It is expected that the reinsurance market would likely increase pricing because of the increased potential exposure. This would, in turn, have a trickle-down effect on the primary workers' compensation marketplace. Further, the ability of insurers to use reinsurance capacity to manage their maximum tolerable losses could prove more difficult, especially for the terrorism perils of NBCR events. This could significantly alter carriers' risk appetites and their willingness to offer coverage to employers with large employee accumulations.

Q.2. Should a lapse in terrorism coverage provided by TRIA occur, what effects do you foresee on the availability and pricing of said coverage?

A.2. If Congress does not extend or renew TRIPRA, the market dynamics for terrorism insurance will be further disrupted and may result in increased pricing as capacity shrinks.

In the absence of a federally mandated offer of TRIA terrorism coverage, there remains the strong likelihood that insurance and capital markets will choose not to offer terrorism coverage—using the premise that there is a higher certainty of returns elsewhere.

TRIA's expiration or substantial modification at extension will almost certainly affect embedded TRIA coverage, standalone terrorism pricing/demand for capacity and TRIA captive programs. Terrorism insurance capacity may be difficult to acquire at reasonable cost for insureds with significant exposures in a central business district of a major (Tier 1) city, or if the properties are perceived as potential targets for terrorism attacks, and/or where there have been instances of foiled plots.

The main alternative for a property terrorism risk transfer mechanism if TRIA is not reauthorized would be the standalone terrorism insurance market. As standalone capacity is finite, the cost of this capacity likely would be considerably higher in areas or cities where demand is high, such as major metropolitan areas, central business districts, iconic buildings, ports/airports, and even "soft targets" such as shopping malls.

This market dynamic varies considerably by location. In certain high-risk cities—such as New York, San Francisco, Chicago, Houston, Atlanta or Washington, D.C.—the cost of standalone terrorism insurance capacity can be multiples of the current pricing for TRIA embedded as part of property programs.

Organizations that employ captives also are likely to be affected in the event TRIA is allowed to expire or is significantly changed. Captives are widely used to supplement what is available in the commercial market, and, in some cases captive insurers are the only available option for certain layers and/or perils. This is most common in areas of higher perceived risk, such as for property or employee-related coverages in major cities. Generally speaking, since captives are best suited to primary operating layers, or as a mechanism for accessing risk transfer solutions, it is very likely that, absent TRIA, captive utilization for terrorism coverage would change significantly.

Q.3. In December 2016, the Department of the Treasury issued guidance which clarified that losses from cyber-terrorist attacks were to be treated the same as commercial property and casualty losses. Do you think this guidance sufficiently covers all forms of cyber attacks?

A.3. The December 2016 guidance from the U.S. Department of the Treasury addressed a unique issue related to TRIA's coverage of cyber perils.

A core insuring agreement for cyber insurance is data asset restoration. When malware encrypts, corrupts or destroys data, a cyber insurance policy can reimburse the cost to restore or recreate that data. This coverage may also include reimbursement for the cost of replacing servers, devices or other components that have been corrupted beyond repair, often referred to as "bricking." In addition to this coverage being available in the cyber insurance market, some property carriers may also offer this coverage. Other carriers, however, may exclude this coverage because the loss does not result from a physical event, such as fire or explosion.

Prior to December 2016, Treasury was silent on whether cyber insurance should be included or excluded from TRIA. As a result, if a quickly replicating, data destroying malware created a widespread data corruption event and corresponding loss of revenue from business interruption, such as NotPetya, TRIA may have responded differently to losses under property insurance policies and cyber insurance policies, even though they responded to the same losses from the same peril.

Accordingly, Treasury's guidance clarified that losses from cyber-terrorist attacks that were subject to the coverage of cyber insurance policies were to be treated the same as commercial property and casualty losses.

Q.4. How do insurers effectively measure and quantify loss from cyber attacks?

A.4. One of Marsh's services as a trusted cyber-risk adviser is to help quantify the potential impact of a cyber attack and to help clients establish controls for ongoing assessment of cyber risk. In some instances, such as data breaches, this can be based on modeling from prior claims activity. In other instances, such as losses from loss of revenues and extra expense from malware events, the lack of claims history may require alternative means of quantification that involves assessment of clients' cyber assets, review of the client's process and procedures for protecting assets and proposing scenarios that could lead to large loss. With collaborative engagements by Marsh brokers and consultants, Marsh offers clients the opportunity to dispel the uncertainty of their cyber exposures and devote adequate resources with optimal results.

RESPONSES TO WRITTEN QUESTIONS OF SENATOR MENENDEZ FROM HOWARD KUNREUTHER

Q.1. TRIA reauthorization is particularly important to my home State of New Jersey, where there is a high population density, important cultural centers and landmarks, and major infrastructure, including ports, rail, and highways.

What are the consequences of letting TRIA expire for high target States like New Jersey?

A.1. The consequences of letting TRIA expire for high target States like New Jersey could be highly significant because many private insurers will likely refuse to offer coverage against terrorism losses to commercial firms because of a concern with the consequences of a catastrophic loss to their operations. Those insurers considering offering coverage will very likely charge much higher premiums than if they are protected by TRIA. The likelihood of a cyber-terrorist attack and its consequences are highly ambiguous so they will focus on worst case scenarios in specifying the price of terrorism coverage.

Q.2. What are consequences of letting TRIA expire for communities around the country that are home to critical infrastructure such as rail lines, power plants, highways, airports, or pipelines? If these investments become more costly, doesn't that have a nationally adverse impact?

A.2. If TRIA expires and critical infrastructure is uninsured and suffers a severe loss from a terrorist attack, this would have a nationally adverse impact. The President might issue a disaster declaration so that Federal assistance could be provided. Including infrastructure losses as part of TRIA could encourage investments now in mitigating future losses through long-term loans and premium reductions, as noted in my testimony.

RESPONSES TO WRITTEN QUESTIONS OF SENATOR WARREN FROM HOWARD KUNREUTHER

Q.1. Certain mass shootings, such as those that occurred in Las Vegas, NV, Sutherland Springs, TX, and Newtown, CT, have not been certified by the Treasury Secretary as acts of terrorism. Therefore, these incidents have not been regarded as qualifying events for terrorism risk insurance, in part, because those attacks did not meet current law's requirement of being "part of an effort to coerce the civilian population of the United States or to influence the policy or affect the conduct of the United States Government by coercion." Given the high frequency of mass shootings in the United States, is there a public policy interest in certifying certain mass shootings committed by individuals as qualifying events for terrorism risk insurance purposes, even if they are not demonstrably intended to coerce Americans or influence U.S. Government policy? Please explain why or why not.

A.1. To address this important issue, the Department of the Treasury needs to interact with private insurers to determine whether insurers now provide protection against mass shootings that may not be caused by terrorists. If there is sufficient private insurance coverage then it may not be necessary to include these events under TRIA. If there is limited coverage against mass shootings, then it will be important to determine who pays for the losses from these events and whether a case can be made to consider including these events under TRIA when it is considered for renewal in 2020.

Q.2. According to Congressional Research Service (CRS) specialist Baird Webel's written testimony, the current terrorism risk insurance program "protect[s] consumers—by requiring insurers that offer [Terrorism Risk Insurance Act]-covered lines of insurance to make terrorism insurance available prospectively to their commercial policyholders." Are there other actions that Congress or Federal agencies could take that would enhance protections for consumers in the terrorism risk insurance market?

A.2. No response provided.

Q.3. According to CRS specialist Baird Webel's written testimony, "Federal law does not limit what insurers can charge for terrorism risk insurance, although State regulators typically have the authority under State law to modify excessive, inadequate, or unfairly discriminatory rates." While one of the original goals of the Terrorism Risk Insurance Program is to preserve State regulation of insurance, is there a public policy interest in developing a Federal limit on what insurers can charge for terrorism risk insurance, or is the current State-centric framework sufficient to prevent abusive practices in the market?

A.3. I feel that insurers should be able to charge premiums that reflect their risks, so State regulators should not restrict the premiums insurers can charge. It will be important for State regulators to make sure that the premiums are high enough so that the insurers has a low chance of insolvency if it suffers a catastrophic loss. One of the important reasons for renewing TRIA is to provide a Federal backstop if insurers' total losses exceed a certain amount. In my testimony I indicated that the Wharton Risk Center's study revealed that total insured losses from a terrorist attack would have to exceed $60 billion before the Federal Government would be responsible for covering any insured losses.

Q.4. On December 27, 2016, the Treasury Department issued "guidance regarding how insurance recently classified as 'Cyber Liability' for purposes of reporting premiums and losses to State insurance regulators will be treated under TRIA and Treasury's regulations for the Program (Program regulations)." That guidance "confirms that stand-alone cyber insurance policies reported under the 'Cyber Liability' line are included in the definition of 'property and casualty insurance' under TRIA and are thus subject to the disclosure requirements and other requirements in TRIA and the

Program regulations[.] Furthermore, that guidance noted, “Cyber risk insurance remains an evolving insurance market, both in terms of product development and regulatory oversight.” Similarly, cyberspace remains a consistently evolving threat environment. At this time, would you recommend any updates to the Treasury Department’s guidance on cyber insurance policies? Please explain why or why not.

A.4. In my testimony I noted that cyberterrorism is an interdependent risk where compromising one computer network can cause losses to many others in the interconnected system. The existence of such interdependencies provides challenges to insurers in determining whether to offer protection against this risk in their terrorism coverage and if so what premium to charge. For this reason I feel that it is important that the Department of the Treasury interact with private insurers to determine whether cyberterrorism should be included under the TRIA backstop. By including it in TRIA both private insurers and the Federal Government would form a private-public partnership to deal with a risk where the likelihood of a cyber-terrorist attack and its consequences are highly ambiguous. With a backstop from the Federal Government if the losses from a cyber terrorist were extremely large, insurers would feel more comfortable insuring this risk and would consider charging a lower premium than if they were fully responsible for a catastrophic loss.

RESPONSES TO WRITTEN QUESTIONS OF SENATOR JONES FROM HOWARD KUNREUTHER

Q.1. Cyber attacks are gaining traction as a preferred method to terrorize individuals and organizations. In 2016, the Treasury Department issued guidance that clarified cyberterrorism is included in TRIA.

Some believe that Russia interference in the 2016 Presidential election by manipulating voters with fake social media accounts is considered cyberterrorism. This type of cyberterrorism has immeasurable consequences and effects Americans that would not even participate in TRIA.

Additionally, the Port of Mobile keeps track of containers that are to be shipped across the country. The Port of Mobile is an important part of Alabama’s economy. If an organization decided to pressure Alabama into particular policy positions by attacking their computer system it would have dramatic effects on business owners dependent on the Port to ship their merchandise.

What cyberterrorism looks like and the effects on people is very different from physical terrorist attacks. How should TRIA adapt to the growing prevalence of cyber attacks that gives private insurance a backstop but also provides policy holders with protection?

A.1. In my testimony I noted that cyberterrorism is an interdependent risk, where compromising one computer network can cause losses to many others in the interconnected system. The existence of such interdependencies provides challenges to insurers in determining whether to offer protection against this risk in their terrorism coverage and, if so, what premium to charge. For this reason I feel that it is important that the Department of the

Treasury interact with private insurers to determine whether cyberterrorism should be included under the TRIA backstop. By including it in TRIA, both private insurers and the Federal Government would form a private-public partnership to deal with a risk where the likelihood of a cyber-terrorist attack and its consequences are highly ambiguous. With a backstop from the Federal Government, if the losses from a cyber terrorist were extremely large, insurers would feel more comfortable insuring this risk and would consider charging a lower premium than if they were fully responsible for a catastrophic loss.

Q.2. Often TRIA is discussed with large cities in mind, but many smaller communities can be targets of terrorist activities. This is shown with the Charleston, South Carolina, church shooting when a white supremacist murdered nine people. Small communities like this are likely to receive insurance from local agents.

Also, Alabama is home to two extremely popular football teams, University of Alabama and Auburn University. The Iron Bowl is an annual game between Alabama and Auburn and draws large crowds from each school. This could easily be a target for terrorist organizations.

How would reforms to TRIA affect smaller communities, particularly their premiums and the extent of their coverage?

A.2. In setting premiums for terrorist coverage, insurers are concerned with the size of the program trigger for TRIA. In 2020 if a terrorist attack creates insured losses less than $200 million, then TRIA will not be triggered. In this case there will be no Federal backstop. If insurers are concerned with having to be responsible for the total losses from mass shootings or a terrorist attack in a small community, they are likely to charge higher premiums and reduce their coverage. Some insurers may decide not to provide protection against mass shootings or to firms in smaller communities from losses from a terrorist attack. In considering the renewal of TRIA, consideration should be given to the size of the program trigger and whether losses from mass shootings from terrorists should be covered by TRIA even if the total insured losses were lower than the TRIA program trigger. If losses from mass shootings would be covered by TRIA, insurers are likely to charge lower premiums and provide more coverage against these terrorist-related disasters.

RESPONSE TO WRITTEN QUESTION OF SENATOR SINEMA FROM HOWARD KUNREUTHER

Q.1. In December 2016, the Department of the Treasury issued guidance which clarified that losses from cyber-terrorist attacks were to be treated the same as commercial property and casualty losses. Do you think this guidance sufficiently covers all forms of cyber attacks? How do insurers effectively measure and quantify loss from cyber attacks?

A.1. In my testimony I noted that cyberterrorism is an interdependent risk where compromising one computer network can cause losses to many others in the interconnected system. The existence of such interdependencies provides challenges to insurers in determining whether to offer protection against this risk in their terrorism coverage and if so what premium to charge. For this reason I feel that it is important that the Department of the Treasury interact with private insurers to determine whether cyberterrorism should be included under the TRIA backstop. By including it in TRIA both private insurers and the Federal Government would form a private-public partnership to deal with a risk where the likelihood of a cyber-terrorist attack and its consequences are highly ambiguous. With a backstop from the Federal Government if the losses from a cyber terrorist were extremely large, insurers would feel more comfortable insuring this risk and would consider charging a lower premium than if they were fully responsible for a catastrophic loss.

RESPONSE TO WRITTEN QUESTION OF SENATOR MENENDEZ FROM BAIRD WEBEL

Q.1. TRIA reauthorization is particularly important to my home State of New Jersey, where there is a high population density, important cultural centers and landmarks, and major infrastructure, including ports, rail, and highways.

What are the consequences of letting TRIA expire for high target States like New Jersey?

What are consequences of letting TRIA expire for communities around the country that are home to critical infrastructure such as rail lines, power plants, highways, airports, or pipelines? If these investments become more costly, doesn't that have a nationally adverse impact?

A.1. TRIA acts to lower the cost of terrorism insurance in two primary ways. (1) It directly subsidizes terrorism insurance by providing reinsurance coverage for no upfront premiums; and (2) it expands the supply of terrorism insurance through the requirement that companies offer terrorism insurance to commercial policyholders. TRIA expiration would remove both the direct subsidy and the extra supply from the market and thus would likely raise the cost of terrorism insurance. The impact of this would be felt to the greatest extent in high target States as insurers would likely seek to reduce their overall exposure to such States. In addition, it would be in such States that lenders would be most likely to require terrorism coverage before providing loans for large commercial real estate projects. A similar dynamic would also come into play with critical infrastructure, thus raising costs for such projects and potentially having a nationally adverse impact as critical infrastructure is necessary for the economy nationwide. If TRIA were to expire, however, Congress might also consider redirecting the resources that are devoted to TRIA to some other use that could support critical infrastructure.

RESPONSES TO WRITTEN QUESTIONS OF SENATOR WARREN FROM BAIRD WEBEL

Q.1. Certain mass shootings, such as those that occurred in Las Vegas, NV, Sutherland Springs, TX, and Newtown, CT, have not been certified by the Treasury Secretary as acts of terrorism.

Therefore, these incidents have not been regarded as qualifying events for terrorism risk insurance, in part, because those attacks did not meet current law's requirement of being "part of an effort to coerce the civilian population of the United States or to influence the policy or affect the conduct of the U.S. Government by coercion." Given the high frequency of mass shootings in the United States, is there a public policy interest in certifying certain mass shootings committed by individuals as qualifying events for terrorism risk insurance purposes, even if they are not demonstrably intended to coerce Americans or influence U.S. Government policy? Please explain why or why not.

A.1. TRIA requires the following for certification of a terrorist attack under the statute. An act must:

(i) to be an act of terrorism;

(ii) to be a violent act or an act that is dangerous to——

(I) human life;

(II) property; or

(III) infrastructure;

(iii) to have resulted in damage within the United States, or outside of the United States in the case of——

(I) an air carrier or vessel described in paragraph (5)(B); or

(II) the premises of a United States mission; and

(iv) to have been committed by an individual or individuals, as part of an effort to coerce the civilian population of the United States or to influence the policy or affect the conduct of the U.S. Government by coercion.

In addition, the statute requires that the act of terrorism cause more than *$5 million in aggregate property casualty insurance losses* in order to be certified. Losses incurred for in health or life insurance are not covered under TRIA.

The certification of an event as an act of terrorism under TRIA serves a relatively narrow statutory purpose. It solely relates to potential sharing of insured losses by the Federal Government and is not referenced in other national security or judicial statutes. In past experience, particularly following the 2013 Boston Marathon bombing, the President in a statement identified an attack as an act of terror, but the relatively low level of insured property casualty losses meant that, under the TRIA criteria, it could not be certified regardless of the motives involved. Due to the precise nature of terrorism exclusions in insurance policies covering some of the Boston businesses who suffered losses due to the bombing, TRIA certification in that case would likely have resulted in coverage gaps and less payments to insureds.[1]

Many mass shooting events may fall into a similar category as the Marathon bombing. While they may inflict a tragic toll on the life and health of those involved, mass shootings may not cause losses in commercial property casualty insurance sufficient to meet

[1] See, for example, "Mass. Regulator on Boston Bombing Claims, TRIA Reauthorization Effort," *Insurance Journal,* April 23, 2014, at *https://www.insurancejournal.com/news/east/2014/04/23/327033.htm;* and "Insurance Payout May Depend on Whether Boston Bombing Was 'Terrorist Act,'" *ABC News,* at *https://abcnews.go.com/Business/boston-firms-wait-terrorism-certification-insurance-payout/story?id=19043385.*

the TRIA criteria for certification. In such cases, only addressing the TRIA criteria with regard to motives may have relatively little effect on potential certification of mass shootings as terrorist events under TRIA. In addition, certification is only the first threshold that must be crossed before the Government would share losses under TRIA. The combination of the program trigger and the insurer deductible make it unlikely that the certification of most mass shootings as eligible for coverage under TRIA would result in any actual loss sharing.[2]

Q.2. According to Congressional Research Service (CRS) specialist Baird Webel's written testimony, the current terrorism risk insurance program "protect[s] consumers—by requiring insurers that offer [Terrorism Risk Insurance Act]-covered lines of insurance to make terrorism insurance available prospectively to their commercial policyholders." Are there other actions that Congress or Federal agencies could take that would enhance protections for consumers in the terrorism risk insurance market?

A.2. Beyond the "make available" provisions TRIA effectively leaves terrorism insurance consumer protection issues (such as affordability of terrorism insurance or the precise details of terrorism insurance policies) to the State insurance regulators as is the case in commercial insurance generally. This primacy of State insurance regulation is codified in the 1945 McCarran-Ferguson Act.[3] It is possible for Congress to revisit this aspect of McCarran-Ferguson with regard to terrorism insurance, as was done to a degree in the original 2002 TRIA, which also nullified terrorism exclusions that previously had been approved by State insurance regulators at the time. Such increased Federal oversight of terrorism insurance, however, would require specific statutory change as the Federal agencies who might provide such oversight, including the Department of the Treasury, the Consumer Financial Protection Bureau, and the Federal Trade Commission, currently have little or no authority to oversee insurance.

Q.3. According to CRS specialist Baird Webel's written testimony, "Federal law does not limit what insurers can charge for terrorism risk insurance, although State regulators typically have the authority under State law to modify excessive, inadequate, or unfairly discriminatory rates." While one of the original goals of the Terrorism Risk Insurance Program is to preserve State regulation of insurance, is there a public policy interest in developing a Federal limit on what insurers can charge for terrorism risk insurance, or is the current State-centric framework sufficient to prevent abusive practices in the market?

A.3. The State regulatory system generally treats commercial insurance lines, such as those covered under TRIA, to less direct

[2] For example, recent press reports suggest approximately $750 million in insured damages for the Las Vegas shooting ("MGM Sees $800 Million Las Vegas Shooting Settlement; $751 Million Covered by Insurance," *Insurance Journal,* May 20, 2019). The primary insurer reported was Zurich American Insurance ("MGM Resorts Sues Zurich American Insurance for Las Vegas Shooting Defense Costs," *Insurance Journal,* June 24, 2019). According to data supplied to CRS by the Treasury Department, Zurich's TRIA insurer deductible would be approximately $1.4 billion. Thus, if the press reports are accurate, even if the Las Vegas shooting were certified, no Federal loss sharing would occur.

[3] Codified at 15 U.S.C. §§ 1011–1015.

oversight on consumer protection grounds than personal lines, such as homeowners insurance or automobile insurance. This is typically justified on the grounds that the businesses purchasing commercial lines are seen as sophisticated consumers who are better able to understand insurance contracts and seek out the best prices.[4] Thus, for example, there is little direct rate regulation in commercial insurance compared to personal insurance where some States require prior approval of rate changes, or have after-the-fact approval processes.

Recent Treasury and private data on terrorism insurance pricing has generally been interpreted as signaling no significant problems in the market; and CRS is unaware of any State departments of insurance taking public action against insurers for excessive rates on terrorism insurance. Overall average rates can, however, mask individual markets that may be facing difficulties. It is within Congress' purview to investigate complaints of excessive rates and enact changes addressing any issues found. Since Congress has found the availability of terrorism insurance important enough on public policy grounds to create and extend the TRIA program, this might also be sufficient grounds to justify additional Federal attention to the affordability of terrorism insurance.

Q.4. On December 27, 2016, the Treasury Department issued "guidance regarding how insurance recently classified as 'Cyber Liability' for purposes of reporting premiums and losses to State insurance regulators will be treated under TRIA and Treasury's regulations for the Program (Program regulations)." That guidance "confirms that stand-alone cyber insurance policies reported under the 'Cyber Liability' line are included in the definition of 'property and casualty insurance' under TRIA and are thus subject to the disclosure requirements and other requirements in TRIA and the Program regulations[.] Furthermore, that guidance noted, "Cyber risk insurance remains an evolving insurance market, both in terms of product development and regulatory oversight." Similarly, cyberspace remains a consistently evolving threat environment. At this time, would you recommend any updates to the Treasury Department's guidance on cyber insurance policies? Please explain why or why not.

A.4. The years since the Treasury guidance have not substantially altered the evolving and uncertain nature of cyber insurance. The combined public-private nature of TRIA, however, provides significant space for private insurers to innovate in the coverages offered for cyber risk while still remaining under the reinsurance backstop provided by TRIA. Treasury's guidance seems clear that policies in the new cyber liability line of insurance are eligible for TRIA coverage. This does not mean, however, that there might not be future issues relating to TRIA coverage in the case of a cyber-terrorist attack. For example, if the exact perpetrators are unknown, it may be difficult for Treasury to certify the attack under the criteria contained in the TRIA statute. It is also possible that a substantial attack might occur but be under the various thresholds in the law

[4] Similar theories are present in financial regulation under Federal law, such as the concept of an "accredited investor" used by the Securities and Exchange Commission. See CRS Report IF11278, "Accredited Investor Definition and Private Securities Markets," by Eva Su.

that limit Federal sharing of terrorism losses. Addressing such issues, however, would be beyond Treasury's authority to address in guidance and would instead require amendments by Congress to the underlying statute.

RESPONSES TO WRITTEN QUESTIONS OF SENATOR JONES FROM BAIRD WEBEL

Q.1. Cyber attacks are gaining traction as a preferred method to terrorize individuals and organizations. In 2016, the Treasury Department issued guidance that clarified cyberterrorism is included in TRIA.

Some believe that Russia interference in the 2016 Presidential election by manipulating voters with fake social media accounts is considered cyberterrorism. This type of cyberterrorism has immeasurable consequences and effects Americans that would not even participate in TRIA.

Additionally, the Port of Mobile keeps track of containers that are to be shipped across the country. The Port of Mobile is an important part of Alabama's economy. If an organization decided to pressure Alabama into particular policy positions by attacking their computer system it would have dramatic effects on business owners dependent on the Port to ship their merchandise.

What cyberterrorism looks like and the effects on people is very different from physical terrorist attacks. How should TRIA adapt to the growing prevalence of cyber attacks that gives private insurance a backstop but also provides policy holders with protection?

A.1. While TRIA does not directly address cyberterrorism, the flexibility inherent in the combined public/private nature of the program has allowed cyberterrorism to be covered by TRIA without specific statutory changes. As long as private insurance policies are covering cyberterrorism, TRIA will as well even if the effects of a cyber-terrorist attack may be substantially different than other forms of terrorism. The purchase of cyber insurance by businesses is growing, however it may not be reaching coverage levels that would be considered optimal from a public policy perspective. For example, higher coverage levels could be desired since insurance often serves to mitigate damage through mechanisms like information sharing on best practices.

There are some aspects of the TRIA design that may not be optimal if the desire is to promote the purchase of cyber insurance and ensure that TRIA provides coverage for a terrorist attack via cyberspace. For example, the program trigger, currently at $180 million and set to go to $200 million, and the 20 percent insurer deductible are high enough that the insured loss levels from many cyber attacks may not cross the thresholds and result in TRIA loss sharing. In addition, the definition of an act of terrorism in the statute requires than an act be "committed by an individual or individuals, as part of an effort to coerce the civilian population of the United States or to influence the policy or affect the conduct of the U.S. Government by coercion." In the case of a cyber attack, however, it may be difficult to even identify perpetrators, let alone define what their intent might be.

Q.2. Often TRIA is discussed with large cities in mind, but many smaller communities can be targets of terrorist activities. This is shown with the Charleston, South Carolina, church shooting when a white supremacist murdered nine people. Small communities like this are likely to receive insurance from local agents.

Also, Alabama is home to two extremely popular football teams, University of Alabama and Auburn University. The Iron Bowl is an annual game between Alabama and Auburn and draws large crowds from each school. This could easily be a target for terrorist organizations.

How would reforms to TRIA affect smaller communities, particularly their premiums and the extent of their coverage?

A.2. The TRIA program does not contain differential application processes or metrics for different-sized communities. However, the thresholds in the Act (*i.e.,* the program trigger, the insurer deductible, and the $5 million loss threshold for certification) may have a differential effect simply due to the cost differences between larger and smaller cities. For example, an identical building is much more expensive to build in Manhattan than Mobile, thus, an otherwise identical terrorist attack will likely cause lower insured damages and be less likely to clear the thresholds for TRIA coverage. Thus, if the TRIA dollar thresholds are raised, this would have in relative terms, a larger effect on these less expensive communities as TRIA coverage would be less likely to be triggered. In practical terms, however, the impact on premiums will be somewhat reduced as the overall cost of insurance in such communities is lower and the risk of a terrorist attack, and thus the premiums for terrorism insurance, is seen as lower.

RESPONSES TO WRITTEN QUESTIONS OF SENATOR SINEMA FROM BAIRD WEBEL

Q.1. In December 2016, the Department of the Treasury issued guidance which clarified that losses from cyber-terrorist attacks were to be treated the same as commercial property and casualty losses. Do you think this guidance sufficiently covers all forms of cyber attacks?

A.1. The Treasury guidance does not overrule the statutory language that is in place, particularly the exemption of specific lines of insurance from the TRIA program. In 2016, the State insurance regulators introduced a new cyber liability line of insurance for regulatory purposes. Prior to this, policies covering cyber risk were reported in different lines of insurance, including in some cases lines of insurance that were specifically exempted from TRIA. This new cyber liability line of insurance largely prompted the Treasury guidance. It is not clear whether some of the coverage for cyber risk is still being covered under an exempted line, but to the extent that damage from a cyber attack still is covered under these exempted lines, TRIA would not cover such an attack. This may very well have less of an impact over time as more future cyber coverage likely will be provided under the cyber-specific line of insurance that is being covered under TRIA.

The guidance also does not affect all of the other statutory aspects of the program, such as the certification requirements and the various monetary thresholds. To the extent that a cyber-terrorist attack might interact differently with these statutory requirements compared to a noncyber attack,[1] Treasury would be limited in its ability to provide coverage under TRIA for such an attack as any guidance cannot contradict the statute upon which it is based.

Q.2. How do insurers effectively measure and quantify loss from cyber attacks?

A.2. Measuring and quantifying loss from cyber attacks is difficult and the insurance coverage for such attacks is still immature compared to more established lines of insurance where the industry might have decades, or even centuries, of data to draw upon. The insurance rating agency AM Best describes the situation as follows:

> Cyber risk modeling is still in its infancy, as events and threat vectors are still evolving. To simulate the event sets and fit them into traditional statistical distribution forms is the first challenge. Cataloging the exposure in an insurer's portfolio to these events and how the losses vary depending on the severity of the attack and estimating the financial damage are all complicated problems that cyber modeling firms are tackling. These models are improving and may provide directional input into relative rankings of risk but need to be complimented with stress testing and analytical, experience-based judgment for pricing, capital consumption, and allocation.[2]

A frequent insurer response to the uncertainty reportedly has been to use certain policy provisions, such as exclusions and limits as well as reinsurance purchases to reduce exposure to large losses.[3] Policy provisions such as exclusions and limits tend to reduce the utility of cyber insurance to consumers and may lead to consumer confusion.[4]

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[1] For example, it seems more likely that a cyber attack might be carried out without immediate attribution to the perpetrating party, thus making it difficult to discern the motive that is necessary for certification.

[2] *AM Best,* "Cyber Insurers Are Profitable Today, but Wary of Tomorrow's Risks," June 17, 2019, p. 11.

[3] See "Data Deficit Remains Key Challenge for Cyber Insurance Underwriters," *Insurance Journal,* June 18, 2019, at *https://www.insurancejournal.com/news/national/2019/06/18/529663.htm.*

[4] See "Businesses Believe Cyber Insurance Covers More Than It Does: Survey," *Insurance Journal,* July 31, 2019, at *https://www.insurancejournal.com/news/national/2019/07/31/534394.htm.*

ADDITIONAL MATERIAL SUPPLIED FOR THE RECORD

MORTGAGE BANKERS ASSOCIATION

June 25, 2019

The Honorable Mike Crapo Chairman Committee on Banking, Housing and Urban Affairs 534 Dirksen Senate Office Building Washington, D.C. 20510	The Honorable Sherrod Brown Ranking Member Committee on Banking, Housing and Urban Affairs 534 Dirksen Senate Office Building Washington, D.C. 20510

Dear Chairman Crapo and Ranking Member Brown:

On behalf of the Mortgage Bankers Association (MBA), thank you for holding the full committee hearing on June 18, 2019, entitled "The Reauthorization of the Terrorism Risk Insurance Program." MBA applauds your leadership and looks forward to working together toward a long-term reauthorization of the program.

MBA is the only national association representing all segments of the real estate finance industry—an industry that employs more than 280,000 people throughout the country. The association works to ensure the continued strength of the nation's residential and commercial real estate markets and to extend access to affordable housing to all Americans. While promoting fair and ethical lending practices, MBA fosters professional excellence among real estate finance employees through a wide range of educational programs and a variety of publications. MBA's membership of over 2,200 companies represents all elements of real estate finance. In particular, the members of MBA provide the vast majority of commercial real estate mortgages in the U.S. The importance of the Terrorism Risk Insurance Act of 2002 and subsequent reauthorizations (TRIA) to the American economy is directly relevant to MBA's membership.

Additionally, MBA is part of the Coalition to Insure Against Terrorism (CIAT). CIAT represents a wide range of businesses and organizations throughout the transportation, real estate, manufacturing, construction, entertainment, and retail sectors in support of reauthorizing TRIA well in advance of its expiration.

A long-term extension of TRIA is vital to the health of the commercial and multifamily real estate finance sector and the nation as a whole. With $3.4 trillion in total mortgage debt outstanding, the commercial/multifamily real estate finance sector is a large and integral part of the national economy. This finance sector includes commercial banks, life insurance companies, Fannie Mae, Freddie Mac, the Federal Housing Administration, commercial mortgage-backed securities (CMBS), debt funds and other institutional sources of capital. Debt capital provided by these various capital sources finances the vast majority of office, retail, industrial and multifamily rental properties that are spread across the fabric of the nation. These buildings house the businesses that are the engines for the nation's vibrant and diverse economy.

Over the past several years, commercial mortgage loans have performed extremely well. The absence of available and affordable terrorism risk insurance, however, would negatively impact the commercial real estate finance sector and would ripple through the economy as buildings became more difficult and costly to finance and purchase.

Since the time that TRIA was under consideration by Congress over 17 years ago, MBA has been a leading voice in supporting this legislation as well as the subsequent reauthorizations of TRIA in 2005, 2007, and 2015. MBA has produced research reports and implementation guidance for TRIA, and MBA has testified before numerous governmental and insurance regulatory bodies.

Terrorism risk insurance is paramount to the $3.4 trillion commercial/multifamily finance sector. This is amply demonstrated when terrorism insurance became either unavailable or unaffordable. A look back to the 14 month period before TRIA was signed into law in November 2002 provides important insight for what the future would hold should TRIA be allowed to sunset on December 31, 2020. In the aftermath of the September 11, 2001 terrorist attacks, terrorism insurance markets seized; a 2002 survey found $15.5 billion of real estate projects in 17 states were stalled or cancelled because of a continuing scarcity of terrorism insurance.[1] The impact on the 9/11 attacks also extended into existing commercial mortgages when $4.5 billion in commercial mortgage-backed securities (CMBS) were downgraded.[2] Clearly, the lack of terrorism insurance coverage impacted both new construction and the commercial mortgage market. While there have been advances in terrorism risk modeling in recent years, the private insurance market cannot solely address this type of catastrophic risk. As a result, the failure to renew TRIA would have a tremendously negative impact on the availability of terrorism risk insurance.

The uninterrupted continuation of TRIA is critical. The private sector still cannot supply adequate terrorism coverage without a federal backstop. That is, despite positive developments over the last 17 years, a sustainable private reinsurance market for terrorism coverage has not fully emerged. A long-term solution for terrorism insurance coverage is therefore a crucial issue for MBA's members, especially servicers whose functions include receipt of insurance and mortgage payments, customer service, escrow administration, investor accounting, collections, and foreclosures, as well as ensuring that properties have necessary insurance coverage in place. MBA's members hold the single largest share of real estate debt outstanding in all markets and bear the lion's share of the financial risk associated with property damage or destruction.

A key objective for TRIA reauthorization is for terrorism risk insurance to remain both available and affordable, in the long-term, for commercial real estate and multifamily properties. The clearest path to this objective is a long-term TRIA extension without modifications, given the success of the program in providing stability to the terrorism risk insurance market. As indicated by the Treasury Department's Report on the Effectiveness of the Terrorism Risk Insurance Program, the program under TRIA has made terrorism risk insurance available and affordable while providing stability to the market.[3]

MBA commends the committee for understanding that TRIA and its reauthorizations have been a success in maintaining stable and affordable terrorism risk insurance for commercial real estate and multifamily properties. We are pleased that the Senate is placing a high priority on TRIA reauthorization.

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[1] "Terror Insurance Drag on Real Estate Still Climbing," Real Estate Roundtable, September 19, 2002.
[2] "Moody's Downgrades Securities on Lack of Terrorism Insurance", Wall Street Journal, September 30, 2002.
[3] "Report on the Effectiveness of the Terrorism Risk Insurance Program," U.S. Department of the Treasury, Federal Insurance Office, June 2018.

As always, thank you for the consideration of the views expressed within this letter. MBA stands ready to assist this Committee and the entire Congress as you examine TRIA and consider its long-term extension or reauthorization. We look forward to our continued work together to promote a more competitive and sustainable real estate finance market in the United States.

Sincerely,

Bill Killmer
Senior Vice President, Legislative and Political Affairs

cc: All Members: Committee on Banking, Housing and Urban Affairs

Statement of the
American Property Casualty Insurance Association (APCIA)

The Reauthorization of the Terrorism Risk Insurance Program

Committee on Banking Housing and Urban Affairs
United States Senate
June 18, 2019

The American Property Casualty Insurance Association (APCIA) commends Chairman Crapo for holding the first hearing on the reauthorization of the Terrorism Risk Insurance Act (TRIA), which is scheduled to expire at the end of next year. Representing nearly 60 percent of the U.S. property casualty insurance market, APCIA promotes and protects the viability of private competition for the benefit of consumers and insurers. APCIA represents the broadest cross-section of home, auto, and business insurers of any national trade association. APCIA members represent all sizes, structures, and regions, protecting families, communities, and businesses in the U.S. and across the globe.

Background

TRIA was first enacted in 2002 in response to the economic challenges the country was facing in the wake of the terrorist attacks of September 11, 2001. As a direct result of the unforeseen and unexpected level of covered losses, insurers quickly began to exclude terrorism risks from coverage in commercial property casualty insurance policies, and this created obstacles for new or ongoing construction projects for which financing was dependent on terrorism insurance. It also created a threat to workers compensation insurers, who are prohibited by state law from excluding terrorism and thus faced enormous potential liability. TRIA requires insurers to offer terrorism insurance on the same terms and conditions as other perils in covered commercial property and casualty lines of insurance. In return, insurers get the benefit of a federal backstop to help pay for losses arising from catastrophic attacks beyond an individual insurer retention outlined in TRIA.

TRIA Promotes Economic Stability

TRIA is a bipartisan success story. Since 2002, it has been reauthorized with significant bipartisan support three times largely because it has been extremely successful in ensuring economic stability in the country at virtually no cost to the taxpayer. In 2015, the Congressional Budget Office (CBO) said that TRIA makes terrorism insurance widely available, reduces the disruption of a terrorist attack to insurance markets, and might secure an orderly economy recovery after a future attack.[1] More recently, the U.S. Treasury Department reported in 2018 that "the Program has made terrorism risk insurance available and affordable in the United States, and the market for terrorism risk insurance has been relatively stable for the past decade."[2] These are exactly the goals Congress had in mind when enacting TRIA.

Unfortunately, the threat of terrorist attacks in the U.S. has not abated. Indeed, there have been attacks or threats of attacks in virtually every state in the country. Insurers still face challenges in underwriting the risk of terrorism with little historical loss cost data and with risk characteristics that defy insurability. Unlike other risks, such as natural catastrophes, where insurers have substantial historical loss data on which to make projections about the risk of future losses, terrorism events have been relatively rare and there is not a statistically significant body of data on which insurers can rely to set actuarially sound prices for terrorism insurance. And terrorism continues to have unpredictable frequency and severity. Unlike natural disasters, terrorist attacks are committed by humans whose behavior can be difficult to predict. And when terrorist attacks happen, they arise in part from a failure of the government to acquire the necessary intelligence data to successfully thwart them – and none of that data is (or should be) available to insurers. For these reasons, insurers are generally unwilling to assume significant terrorism risks without the TRIA backstop in place.

This fall, insurers will begin to negotiate new policies with their policyholders for policies with durations running past the current scheduled year-end 2020 expiration of TRIA. As in the past

[1] *Federal Reinsurance for Terrorism Risk: An Update*, Congressional Budget Office, January 6, 2015.
[2] *Report on the Effectiveness of the Terrorism Risk Insurance Program*, Federal Insurance Office, U. S. Department of the Treasury, June, 2018.

when faced with an impending TRIA program expiration, insurers will begin to include "springing exclusions" under which any terrorism coverage provided under the policy will go away if and when TRIA goes away. This is done as a hedge in the event that the program is not reauthorized as insurer appetite for covering terrorism in the absence of TRIA clearly remains low. It is equally clear that the sooner the Congress reauthorizes TRIA, the less disruption there will be in the insurance marketplace for both insurers and their consumers. And because uncertainty is also created when the program reauthorizations run for short periods of time, APCIA supports a reauthorization for as long a period as possible.

TRIA Protects Taxpayers

TRIA does an excellent job of keeping commercial insurers participating in the terrorism insurance market, thus protecting taxpayers from economic loss due to terrorism. Unlike many other government insurance programs, under TRIA, private sector insurers are on the hook for all but the most catastrophic terrorism losses. Commercial insurers pay losses under the aggregate program trigger and through their very high annual individual TRIA deductibles and co-pays once the program is triggered. While the private market's capacity has its limits (as discussed in more detail below), TRIA does keep the government at a truly catastrophic level – essentially only for those terrorism losses that the private market is unwilling or unable to insure on its own. According to the Congressional Research Service, the federal government currently spends an average of $8 billion annually on disaster assistance. Having the federal government responsible for future terrorism losses that exceed the insurance market capacity after a national security interdiction failure protects the taxpayers and Congress alike from the political pressure to parachute disaster assistance in for innocent victims after a tragic terrorism attack.

Under TRIA, the marketplace pays for any federal backstop loss payments through a post-event surcharge if TRIA is triggered. This post-event payment structure is common for state insurance guaranty funds and several government residual markets and is particularly appropriate for protecting against extreme but rare and unpredictable catastrophic risk where accumulating and segregating the necessary capital in advance would be inefficient. Under TRIA, in the event the federal backstop is triggered, Treasury has the opportunity to recoup government payments from the marketplace, in the form of a post-event surcharge on all property casualty insurance policies providing coverage in TRIA-covered lines. By next year, recoupment will be mandatory when the marketplace aggregate insured losses are $37.5 billion or less (and the government recoups 140 percent of what it pays out in losses) but is discretionary when losses are above that amount. This feature, coupled with the program's focus on keeping the private market heavily involved insuring terrorism risks, makes TRIA an extraordinarily fiscally responsible program, the primary beneficiaries of which are insurance *consumers* and *taxpayers* – not insurers.

TRIA Deductibles, Co-Pays, and Program Trigger

In past reauthorization debates, Congress has often revised TRIA to attempt to increase private sector participation in the terrorism insurance market and reduce taxpayer exposure under TRIA. Over the years, the TRIA insurer deductible, the co-pay, and the program trigger have all gradually increased to the point where the availability of the federal backstop has become increasingly remote for many insurers. This has become an enduring concern for all APCIA members, regardless of size. It is important to remember that in 2002 insurers accepted TRIA's bargain, *i.e.*, that they would agree to be required to offer terrorism coverage in return for the federal backstop at very high levels. But the value of that bargain for insurers is fading significantly as the backstop becomes more and more remote, but the requirement to make terrorism coverage available remains unchanged. The effective loss of the federal backstop will ultimately cause many insurers to consider pulling back from markets, not only for stand-alone terrorism insurance, but for other lines for which an offer of terrorism insurance is mandatory. This threatens to cause the program to fail to serve the purpose Congress originally intended – to ensure economic stability both before and after the next attack – and may cause a reduction of insurance availability more generally for lines such as workers' compensation as insurers evaluate their tolerance for terrorism risk exposure.

Deductibles. Because insurer deductibles under TRIA are based on all covered commercial lines premium rather than correlated to terrorism risk specifically, rising deductibles make it unlikely that many large insurers will ever reach their TRIA deductible at all, even in a catastrophic event several times larger than September 11. Those companies will shoulder any terrorism losses on their own with no assistance from the federal backstop, and TRIA becomes a solvency management tool, not a market opportunity to write more terrorism risk. For smaller and mid-sized companies, the threat is even more severe. Because of their smaller capital base, smaller insures are less able to absorb large losses. A 10 percent or greater surplus hit to a small or medium-sized insurer may very well be a company closing event. At the very least, it risks a downgrade by credit rating agencies below the level required to retain many commercial accounts. The current 20 percent TRIA deductible is greater than 10 percent of company surplus for 35 percent of all TRIA insurers (796 companies). Those companies are potentially vulnerable to rating agency downgrades and precarious company stability due to the negative impact to their surplus at the current 20 percent TRIA deductible. Very few companies of any kind would voluntarily put such a large portion of their capital at risk to a single threat, but insurers are required to do so under the current TRIA law. Increasing the deductible further could drive many insurers out of markets as they would be unable to responsibly underwrite at current capital levels with that sort of unavoidably large terrorism risk on their books. Moreover, many business consumers are only able to purchase insurance coverage from a carrier with a minimum financial rating, but many insurers are at risk of ratings downgrades as the federal backstop becomes more remote. The effect would be anti-competitive, leaving fewer insurers providing less terrorism capacity at a higher price than is presently available. This outcome is counter to TRIA's goal of bringing stability to the market and ensuring that adequate capacity exists to meet the markets' need.

It is also extremely important to recognize that insurers' share of terrorism risk will continue to grow (and the taxpayers' share will decline) *even if Congress makes no changes to the TRIA program*. This is because insurer deductibles are calculated as a percentage of the prior year's direct earned premium in TRIA covered lines. As premiums rise over time – whether because of business growth, inflation, or both – so too do insurer deductibles. This means the federal backstop will continue to get more remote for many insurers even without an increase in the percentage deductible. If Congress were now to increase the percentage deductible even more, as it has sometimes done in the past, the problem of the vanishing backstop would become even more severe.

Co-Shares. The problem would be made worse by any increase in the insurer's TRIA retention (coinsurance share) on losses above the insurer deductible. Once an insurer meets its TRIA deductible, it must then participate with the federal backstop in paying losses above the deductible. By next year, the insurer co-share will be 20 percent of the loss above the deductible. While an insurer at least knows what its maximum deductible would be in any catastrophic event, the co-share is limited only by the $100 billion annual program cap. Since workers compensation by law requires unlimited coverage for insured risks, a 20 percent co-share of a $100 billion loss would threaten the solvency of almost every workers compensation insurer. For example, a medium-sized insurer with $1 billion in annual earned premiums might underwrite to a probable maximum loss of $100 million. But if the terrorists go after that insurer's policyholders and cause $100 billion or more of insured losses, the insurer would pay a $200 million deductible and a nearly $20 billion co-pay.

Program Trigger. The level of the annual aggregate program trigger determines whether and when the government's obligations arise. The current $200 million trigger is now double what it was prior to the last program reauthorization. A higher trigger makes it much less likely that smaller and mid-sized insurers will realize the benefits of the program that allow them to continue writing coverage the marketplace and the economy need. In 2018, roughly 74 percent of all TRIA writers had surplus less than the current $200 million program trigger, all of which are small or medium sized companies. For a large percentage of insurers, the $200 million trigger already exceeds their 20 percent deductible. Further increases in TRIA's program trigger could force many small and mid-sized insurers to exit risks or markets altogether when adequate reinsurance is neither available nor affordable.

When the greatest possible number of strong, viable competitors serve the market, insurance consumers have more choices, prices are more competitive, and product innovation is enhanced. As noted above, the backstop is already becoming increasingly remote for many insurers because of past increases in program thresholds and natural premium growth, which increases deductibles without any structural changes in the program. If TRIA is reauthorized with even further increases in these thresholds, it will become an unviable program for any insurer. Overall availability and affordability will be greatly reduced – not only for terrorism coverage but also for other commercial lines of insurance as well. This clearly would be bad for consumers, would undermine TRIA's intended purpose, and would turn TRIA from an economic stability mechanism to a program that would generate instability and market uncertainty.

Workers Compensation

The TRIA program is especially critical for the workers compensation market. Workers compensation provides statutory benefits, including lifetime medical benefits, rehabilitation services, wage replacement payments, and extensive survivors' benefits to spouses and dependent children. These "long tail" benefits can run for years or decades. Medical benefits are unlimited and can total in the millions of dollars for a single catastrophic injury. Under state law, coverage for injuries resulting from acts of terrorism cannot be excluded form workers compensation policies, including the terrible injuries that would occur from a nuclear, biological, chemical, or radiological (NBCR) attack. As the marketplace experienced in the year following the terrorist attack of September 11, without TRIA, adequate reinsurance coverage for terrorism was very difficult to obtain, especially for high profile risks, regions with high value accumulations, or in the case of NBCR terror attacks. Without adequate reinsurance, many insurers could be forced to exit portions of the market, capacity could be strained potentially, and the immense scale of potential unlimited terrorism losses for workers compensation insurers could impair the ability for carriers to pay the claims of injured workers. While reinsurance is somewhat more available at the moment than it was immediately after September 11, that will not always be the case. In the future, particularly following the next global catastrophe, there will always be gaps in coverage. Prior to the last reauthorization, the rating agency A. M. Best identified several insurers for potential downgrades if TRIA were not renewed, and most were workers compensation carriers.

Cyber Coverage

As the TRIA reauthorization debate progresses, APCIA anticipates that many members of Congress will have questions about how cyber insurance coverage is impacted by TRIA. Cyber insurance is an important risk transfer mechanism with many beneficial biproducts that can help companies think through their risk mitigation efforts and provide access to important pre- and post-event mitigation tools such as tabletop exercises and forensic analysis. It is generally understood that cyber insurance is covered as long as it is offered in a TRIA-covered line. However, a considerable amount of cyber coverage is provided as professional liability insurance, which is not a TRIA-covered line, and some have asked whether the statute should be amended to provide that cyber coverage sold as professional liability insurance is covered by TRIA. A somewhat more complex question may be whether a cyber terrorism event fits within TRIA's definition of "act of terrorism" such that a cyber attack would be likely to be certified by the Treasury Secretary as an act of terrorism under TRIA. The current definition was drafted in 2002 before cyber terrorism was on the minds of policymakers, and it does not explicitly mention cyber risks. The definition contemplates an act that is "dangerous . . . to infrastructure", but the term "infrastructure" is not further defined. The private cyber insurance marketplace has been healthy and growing rapidly, but APCIA would welcome further discussions with Congress and other policymakers on continuing to strengthen the public-private cyber security interface.

Conclusion

It is essential for our national security and America's economy to have a terrorism risk insurance plan in place to keep the business engine running, including ensuring that large projects can be completed in a timely, cost effective manner both before and especially after a terrorist attack occurs. TRIA is a fiscally responsible program that has cost the taxpayers almost nothing in its 17-year existence, while supporting economic resiliency. It also reduces the need for additional government catastrophic response programs that can be far more costly after the fact. APCIA strongly supports reauthorization of the current TRIA program as quickly as possible, for as long a duration as possible, and with stable thresholds that will continue to encourage insurers of all sizes to provide private sector capital to compete and ensure availability of terrorism coverage the marketplace and the economy demand.

CIAT COALITION TO INSURE AGAINST TERRORISM

www.insureagainstterrorism.org

June 18, 2019

The Honorable Mike Crapo	The Honorable Sherrod Brown
Chairman	Ranking Member
Committee on Banking Housing and Urban Affairs	Committee on Banking Housing and Urban Affairs
United States Senate	United States Senate
Washington, DC 20510	Washington, DC 20510

Dear Chairman Crapo and Ranking Member Brown:

Thank you for holding this important hearing to examine the reauthorization of the Terrorism Risk Insurance Program (TRIP). The Coalition to Insure Against Terrorism (CIAT) is writing today to express its strong support for a long-term reauthorization of TRIP and to urge prompt Congressional action to renew this critical program.

CIAT is a broad coalition of commercial and non-profit insurance consumers formed immediately after 9/11 to ensure that all American businesses could obtain comprehensive terrorism insurance. The diverse CIAT membership represents commercial real estate, banking, energy, construction, hotel and hospitality, higher education, manufacturing, transportation, entertainment, the major league sports and racing, as well as public sector buyers of insurance. According to a 2019 Marsh[1] study, the education, health care, financial institutions, and real estate sectors had the highest 'take-up' rates among the 17 industry segments surveyed – all above 70%.

Terrorism continues to pose a clear and present danger to our nation and to the American economy. According to the Department of Homeland Security, the U.S. continues to face one of the most challenging threat environments since 9/11. There is no homeland security without economic security. One of the stated aims of terrorists is to disrupt our economy. For example, Quazi Nafis, the Bangladeshi student arrested for plotting to attack the New York Federal Reserve in 2012, declared "... targeting America's economy is [the] most efficient way to draw the path of obliteration of America."[2]

The Program has been, and remains, extremely effective in achieving its primary purpose, which was to stabilize the market following 9/11 and to ensure the continued availability of terrorism coverage for commercial policyholders in the future. America needs a stable and reliable terrorism insurance market so that employers can invest in assets and create jobs without assuming the risk and liabilities of a terrorist attack. At almost no cost to the taxpayer, the Program has been the key factor in ensuring that the private insurance market has remained intact

[1] *2019 Terrorism Risk Insurance Report*, Marsh Risk Management Research, 2019.
[2] Sam Mullins, *'Home-Grown' Jihad: Understanding Islamist Terrorism in the US and UK* 199 (2016).

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and continues to meet the needs of commercial policyholders during the on-going threat of a future terrorist attack – all while minimizing federal taxpayer exposure.

As the principal buyers of terrorism insurance, CIAT members remember all too well the economic environment that led to establishment of the program. In the aftermath of 9/11, it was virtually impossible for commercial policyholders to secure coverage against terrorism risk; however, banks and other capital providers would not provide financing without it. According to a Real Estate Roundtable survey, over $15 billion in real estate-related transactions were stalled or even cancelled because of a lack of terrorism risk insurance in the 14 months between 9/11 and TRIA's enactment. Additionally, due to deferred construction investment, the White House Council of Economic Advisors estimated that there was a direct loss of 300,000 jobs during that period. In short, the lack of availability of terrorism insurance for commercial policyholders had a very real and far-reaching impact on the economy. It further underscores the need to have TRIP in place to minimize the economic fallout from the next terrorist attack.

CIAT concurs with the 2018 Department of Treasury Federal Insurance Office's "*Report on the Effectiveness of the Terrorism Risk Insurance Program*" which concluded that the current terrorism risk insurance program is "effective in making terrorism risk insurance available and affordable in the insurance marketplace,"[3] and that there is insufficient "private reinsurance capacity for the exposure the Program currently supports in connection with a catastrophic terrorism loss."[4] There is no evidence that private markets can develop adequate terrorism risk capacity without some type of federal participation. Acts of terrorism are man-made, infrequent, and potentially catastrophic, which means quantitative risk models can't be used to accurately analyze terrorism risk. These tools only work for exposure to natural disasters, such as hurricanes, where there is extensive loss experience. Terrorism has no season, no region, and no reliable pattern.

Without TRIP in place, we believe the availability of terrorism risk coverage will diminish, or insurers will simply stop offering the coverage altogether. CIAT members have seen evidence of this each time that the TRIP has been up for renewal (most recently in 2014). In each instance, policy renewals often included "springing exclusions" which would have voided terrorism coverage upon the expiration of TRIA. Additionally, faced with this gap in terrorism coverage and uncertainty about the continuation of the program, businesses are forced to secure expensive standalone coverage. While the Program does not expire until the end of 2020, it is important that Congress act quickly to avoid these economic disruptions.

Should the Program be allowed to sunset, we would expect a period of profound economic slow-down – posing a very real threat to our economic and homeland security. American businesses, colleges and universities, hospitals, real estate owners, and the entire financial services system all depend on their ability to finance insured collateral. Without the ability to maintain adequate insurance coverage, a business or a property owner's capacity to finance is materially impaired and its liquidity is jeopardized.

In conclusion, the Program has been a tremendous success. It is a comprehensive plan to provide for economic continuity and recovery in the wake of a major terrorist attack, while simultaneously protecting taxpayers via a mandatory recoupment mechanism. CIAT urges Congress to promptly enact a long-term reauthorization of this important program.

Sincerely,

The Coalition to Insure Against Terrorism

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[3] FEDERAL INSURANCE OFFICE, U.S. DEPT. OF THE TREASURY, REPORT ON THE EFFECTIVENESS OF THE TERRORISM RISK INSURANCE PROGRAM 2 (June 2018).
[4] Id. at 47.

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Statement of National Association of Mutual Insurance Companies to the United States Senate Committee on Banking, Housing, and Urban Affairs Hearing on The Reauthorization of the Terrorism Risk Insurance Program

June 18, 2019

Comments of the National Association of Mutual Insurance Companies
The Reauthorization of the Terrorism Risk Insurance Program
June 18, 2019

INTRODUCTION

The National Association of Mutual Insurance Companies (NAMIC) is pleased to provide testimony on the Terrorism Risk Insurance Act (TRIA) and the private market for terrorism insurance.

NAMIC is the oldest property/casualty insurance trade association in the country, with more than 1,400-member companies representing 41 percent of the total market. NAMIC supports regional and local mutual insurance companies on main streets across America and many of the country's largest national insurers. NAMIC member companies serve more than 170 million policyholders and write more than $253 billion in annual premiums. Our members account for 54 percent of homeowners, 43 percent of automobile, and 35 percent of the business insurance markets. Through our advocacy programs, we promote public policy solutions that benefit NAMIC member companies and the policyholders they serve and foster greater understanding and recognition of the unique alignment of interests between management and policyholders of mutual companies.

Since the events of September 11, 2001, the federal government has developed a robust and sophisticated counter-terrorism apparatus that has thus far succeeded in preventing large-scale terrorist attacks on the United States homeland. However, the threat of terrorism is continuing to evolve amid a changing, unstable, and dangerous international environment. Attacks such as the Boston Marathon bombing are stark and painful reminders that the United States must remain vigilant. Unfortunately, it will likely never simply be about prevention – response and recovery are also integral pieces of the country's national security. It is vital that we, as a nation, protect the U.S. economy from the financial devastation that could accompany a catastrophic terrorist attack and help get it back on its feet after an attack.

Insuring against the losses from such an attack could be one way to achieve that vital protection. However, simply put, terrorism is not an insurable risk as it involves strategic human behavior and represents a dynamic threat that is intentional, responsive to countermeasures, and purposefully unpredictable. The objectives of terrorists, the means and methods of achieving those objectives, and the propensity to collaborate with unknown national and international actors are not knowable or measurable in a commercial context. Compare this with hurricanes and floods, which, as forces of nature subject to relatively stable and statistically predictable laws of behavior, enable insurers to predict the frequency and severity of such risks, and therefore, to properly underwrite them on both a local and catastrophic basis. In short, insurers cannot underwrite risks that lack a statistically reliable foundation.

Following 9/11 it became evident that no self-sustaining private market for terrorism risk coverage was likely to develop. Therefore, in 2002, Congress passed the Terrorism Risk Insurance Act, or

TRIA, creating a risk-sharing mechanism between the private and public sectors. This mechanism allows for a large and temporal transfer of risk that would not occur in a fully private market but does – potentially exclusively – utilize private capital.

The TRIA program creates the space to allow a viable private market to function. The unique structure of the program's recoupment mechanism takes losses that could render a single company insolvent and spreads them throughout the private sector and over time. This has created the certainty needed for the commercial insurance industry to effectively operate and policyholders to purchase coverage that would otherwise be unavailable. Now, losses from all but the largest terrorist attacks are completely borne by the private sector without involvement of the TRIA program.

The purpose of the program is to make sure that the economy can recover in as orderly a fashion as possible from a terrorist event. In order to encourage private-sector involvement in the terrorism insurance marketplace – and thereby protect and promote our nation's finances, security, and economic strength – the U.S. needs a well-functioning terrorism loss management plan. Fortunately, the current TRIA program has proven to be such a plan.

CREATING THE TRIA PROGRAM[1]

Before the events of 9/11, the abstract possibility of a major terrorist attack on the U.S. was known but not understood by most people. At the time, terrorism was typically included in "all-risk" policies because the risk was deemed so small as to be incalculable. Then, in one morning, the 9/11 attacks caused roughly $46.3 billion[2] in insured losses.[3]

Soon after the attacks, reinsurers and then insurers moved to exclude terrorism coverage from their new and renewing policies as this was a poorly understood risk that could potentially produce previously unimaginable losses. Consequently, the ability of commercial policyholders to purchase adequate coverage at affordable prices was severely constrained. As a result, many were forced to go without coverage or only partly insure their assets. In states that prohibited carriers from excluding coverage for terrorism and with reinsurance companies universally excluding terrorist acts in property/casualty treaties, most carriers only alternative was to offer less coverage or not write the business at all.

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[1] This paper will be using the Terrorism Risk Program's statutory numbers for the year 2020 throughout.

[2] Insurance Information Institute, "Background on: Terrorism risk and insurance" May 30, 2019.

[3] All dollar amounts in this paper are calculated using 2019 dollars.

The lack of adequate insurance capacity and significant increases in pricing of commercial multi-peril business resulted in the postponement or cancellation of many construction projects. It was estimated at the time to have delayed or cancelled $21 billion[4] in real estate transactions and cost 300,000 construction workers their jobs.[5] Given the economic uncertainty this created and the insurance industry's serious concern about properly managing this risk, Congress passed and President George W. Bush signed into law the Terrorism Risk Insurance Act of 2002. It was quickly realized that without the program American businesses would be hard pressed to find or afford the coverage they needed, so TRIA was extended for two years in 2005, seven years in 2007, and again for six years at the beginning of 2015.

Essentially, TRIA limits an individual company's potential terrorism losses, which permits them to quantify their terrorism exposure and make coverage available. The program was purposefully designed to force insurers back into the terrorism insurance market in exchange for this loss limitation in the event of a certified terrorist event.

There are several key elements to the program:

• **Required Offering of Terrorism Coverage:** The current program requires all insurers selling covered lines to offer terrorism coverage, compelling many insurers that had previously exited that market to return and dramatically reducing the amount of potentially uninsured losses in the event of an attack. Insurers are required to offer coverage for acts of terrorism on the same terms and conditions as other coverages, although this does not include coverage for nuclear, biological, chemical, and radiological-attacks. Currently policyholders are not required to purchase the offered coverage, and in the last few years take-up rates have plateaued in the 60 percent to 65 percent range.

• **Certified Act of Terrorism:** In order to involve the TRIA program, an individual act of terrorism must be certified by the secretary of the Treasury in consultation with the secretary of Homeland Security and the U.S. attorney general. To be a certified act, losses must exceed $5 million. 1 This paper will be using the Terrorism Risk Program's statutory numbers for the year 2020 throughout. 2 All dollar amounts in this paper are calculated using 2019 dollars. 3 Real Estate Roundtable, "Survey Confirms Economic Toll of Terrorism Insurance Gap: Over $10 Billion of Real Estate Projects Affected Across U.S.," September 4, 2002 4 President George W. Bush, "President Reiterates Need for Terrorism Insurance Agreement," October 3, 2002. NAMIC ISSUE ANALYSIS 4 This NAMIC Issue Analysis is brought to you by the NAMIC Advocacy team.

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[4] Real Estate Roundtable, "Survey Confirms Economic Toll of Terrorism Insurance Gap: Over $10 Billion of Real Estate Projects Affected Across U.S.," September 4, 2002

[5] President George W. Bush, "President Reiterates Need for Terrorism Insurance Agreement," October 3, 2002.

• **Program Trigger:** Best conceived of as a "light switch," the TRIA program is "switched on" only if the insurance industry's aggregate insured losses exceed $200 million in a given year. Once "on" the trigger level has no bearing on the federal government's share of the losses in a specific event.

• **Deductible**: Each insurer is responsible for paying out a portion of its claims – the "deductible" or "individual company retention level" – before any federal involvement. An insurer's deductible equals 20 percent of an insurer's annual direct earned premiums from the year prior to a certified event from covered TRIA lines. For some companies, these deductibles are in the billions of dollars.

• **Co-Share:** For each insurer's losses above its deductible, the insurer covers 20 percent and the federal government covers 80 percent until the amount of losses totals $100 billion, after which there is no requirement that insurers or the government provide coverage.

• **Mandatory Recoupment:** By law, the federal government must recoup the difference between insurers' total costs and the industry aggregate retention level, which is calculated as the sum of all the individual company deductibles estimated at $46 billion. This recoupment takes place in the years following the federal sharing of insurer losses, with the Treasury Department establishing surcharges on all covered commercial policies and is required to recoup 140 percent of the initial outlays to insurers under the program. This mandatory recoupment will not apply for losses above the industry aggregate retention level. In that case, however, the Treasury secretary retains discretionary authority to apply recoupment surcharges for all losses above this level. Ultimately, every dollar spent by the federal government is recoupable under current law.

To reiterate, taxpayers are completely protected under TRIA. The program essentially acts as a post-funded payment mechanism for the catastrophic tail coverage of terrorism risks. This coverage is valuable but not priced explicitly nor paid for upfront – it is paid for in the event it is used and in effect pricing is determined after any event. This structure is common for risks that are more difficult to quantify and where there is great uncertainty as to the range of possible outcomes – nuclear power plant disasters are another example.

It is this structure of the current TRIA program that has created space for a private market to operate under the umbrella of federal participation. Private-sector involvement reduces the unaddressed financial needs of victims, which, in turn, reduces the necessity of government intervention – thus taxpayer exposure – post-attack. Just as important, what TRIA does is define the government's role in advance of a catastrophe rather than relying on ad-hoc authorizations after the fact, thus allowing all parties to plan efficiently.

PUTTING THE TRIA PROGRAM INTO PRACTICE

Imagine a certified terrorist event in Chicago in 2020 that causes $25 billion in total losses for covered lines, such as workers' compensation, property, and business interruption. Determining coverage and payment proceeds as follows:

STEP 1: Determine which losses are covered.

For workers' compensation insurance, no terrorism exclusions are allowed, so all losses will be covered, but for property or other lines the policyholder had a choice to accept or reject terrorism coverage. Review of the policies and coverages will determine whether the losses are covered.

Let us assume for illustration purposes that $20 billion of the $25 billion in losses are covered.

STEP 2: Determine if TRIA program is triggered.

The $20 billion in covered losses exceeds $200 million program trigger level so the program is triggered.

STEP 3: Insurance companies process claims and pay all insured losses.

Each individual insurer that sustained losses processes its policyholders' claims and pays all insured losses, which, in this example, total $20 billion.

STEP 4: Insurance companies calculate their share of insured losses.

First, each insurance company calculates its deductible based on the formula – 20 percent of applicable 2019 premium, the year prior to the certified event. For purposes of illustration, imagine all insurance companies involved have deductibles that equal $5 billion.

Second, each insurance company calculates its 20 percent share of losses above its deductible up to the total program cap of $100 billion. In this example, the insurance companies co-share is another $3 billion, which is 20 percent of $15 billion, the amount of the sum of $20 billion in covered losses minus $5 billion in deductibles.

STEP 5: The federal government reimburses insurers for a portion of the insured losses.

The federal government reimburses insurers for losses not covered by the insurers' deductibles and co-share. In this case, the federal government's share is $12 billion: $20 billion in losses minus $5 billion in insurer deductibles minus $3 billion in insurer co-share.

STEP 6: Determine recoupment by the federal government.

Because the total insurance industry cost of $8 billion did not exceed the estimated industry aggregate retention of $46 billion, the federal government is required to recoup 140 percent of the $12 billion in TRIA outlays through premium surcharges, or $16.8 billion.

(NOTE: If the event had been big enough that the total insurance industry costs met or exceeded the industry aggregate retention of $46 billion, the Treasury secretary has the discretion to pursue further recoupment of all monies).

SUMMARY: Under this $25 billion loss scenario ($20 billion in covered losses), policyholders who made a conscious choice not to purchase terrorism coverage would end up paying or absorbing $5 billion. Affected insurers would be responsible for paying $8 billion and the federal government would pay $12 billion initially. All policyholders and commercial insurers would be assessed $16.8 billion through surcharges on policies going forward to repay the government.

Net to the federal government: +$4.8 billion

Total Covered Losses	$20B
Insurer Deductibles	$5B
Insurer Co-Sharing	$3B
Total Industry Losses	$8B
Initial Government Outlay	$12B
Mandatory Recoupment	$16.8B (140% X $12)
Net to Federal Government	+$4.8B

WHY IS THE PROGRAM NECESSARY?

Managing terrorism risk defies the normal underwriting practices of insurers. Terrorism involves strategic human behavior and represents a dynamic threat that is intentional, responsive to countermeasures, and purposefully unpredictable. Immediately following 9/11, some held out hope that, given time, modeling and underwriting methods could be developed and utilized to help insurers manage terrorism risk. And indeed, much has been done to develop modeling tools to manage aggregate loss exposures that are based on a predetermined event of a certain magnitude in a given area. However, due to the nature of terrorist events, it is not possible to use history to model where an attack is likely to happen or the potential frequency of attacks.

The reasons for the difficulty of underwriting terrorism risk are numerous and profound:

- **Identical to Acts of War –** Acts of war have always been considered uninsurable events, with either an implicit or explicit expectation that financial responsibility resides with the governments involved. War-related damage has never been covered by insurers and no one has suggested that something must be done to maximize private-sector capital to be used to provide such coverage. Simply because stateless, transnational groups are perpetrating these acts of terror does not categorically change their war-like nature.

- **Absence of Meaningful Actuarial Data –** The data that insurers normally rely on when considering whether coverage can be offered and, if so, at what price, either does not exist or is not available. In the case of natural catastrophe risk, a company can rely on decades of relevant event data that can be plugged into mathematical models to quantify risk – there is no comparable historical record on which to draw for large-scale terrorist events. Further, much of the relevant data that might be used by an insurance company is appropriately kept secret by the federal government for national security reasons. Without access to this type of information insurers cannot meaningfully calculate the likelihood, nature, or extent of a potential event, making pricing and reserving virtually impossible. Although in theory access to classified information might paint a more accurate picture of the threat matrix facing targets in the U.S., insurers should not – and are not asking to – be given state secrets to write terrorism coverage. UNDERSTANDING THE TERRORISM RISK INSURANCE PROGRAM For more NAMIC Issue Analyses, please visit namic.org/issues/our-positions.

• **Intentional Acts –** Terrorist acts are deliberate acts and do not occur randomly. Because of this, there is no way to determine the probability that a particular property or asset will experience a terrorism-related loss. Part of the difficulty in assessing terrorism risk stems from the fact that, because of response measures taken in the wake of an attack, the next event is unlikely to follow a similar pattern. Unlike criminal acts, such as robbery, where the goals are predictably targeted, the goal of maximizing death and destruction can be accomplished in countless ways, anywhere and at any time. And terrorism is not comparable to a random event – a hurricane does not study wind-damage mitigation efforts and then think up new ways to get around them. The only truly effective mitigation tools – if there are any – reside within the government's national security apparatus, but as noted above, these are understandably kept secret.

• **Risk Concentration –** Terrorism risk is highly concentrated and incredibly difficult to effectively pool across geographical locations and policyholder type, particularly in an age of mass-casualty terror. Acts of terrorism on the scale of 9/11 are what are known as a "clash events," meaning they cause significant losses across multiple lines of insurance. These types of events directly threaten the solvency of both insurers and reinsurers and are not typically covered risks. In a fully free market, it would likely be the case that highly concentrated urban areas in particular would find it difficult to find or afford coverage for terrorism.

• **Interdependencies –** At the very highest level, the nation's foreign policy decisions and the effectiveness of its homeland defense have a direct impact on the likelihood and success of an attack. At the policyholder level, the vulnerability of one organization is not simply dependent on its own security decisions, but also on the decisions of other organizations and agents beyond its control.

In the end, it is more accurate to think of the TRIA program's purpose not as providing reinsurance for losses resulting from "acts of terrorism," but as protection from losses that result from a failure in the government's systems for detecting and preventing acts of terrorism. With respect to natural catastrophe risk, it would be absurd to assign to a government agency the task of preventing hurricanes, tornadoes, and earthquakes. But it makes perfect sense for citizens to expect their government to prevent attacks by America's enemies, and that is precisely what Americans have come to expect from their government in the aftermath of 9/11. It is now widely recognized that one of the federal government's fundamental duties is to prevent terrorist attacks through effective counter-terrorism measures. Only if the government is unsuccessful in interdicting terrorist plots will Americans incur terrorism losses. "Terrorism risk" is best understood as the risk of government counter-terrorism failure.

Accordingly, while the private insurance industry is willing to assume a substantial portion of this risk within the limits of its capability, the ultimate responsibility for managing the risk of counter-terrorism failure does and should rest with the federal government.

TRIA STRUCTURE DESIGNED FOR INDIVIDUAL COMPANY PARTICIPATION

Discussions surrounding the private terrorism risk insurance market tend to focus on aggregate numbers – i.e. how much market capacity exists, industry exposures, etc. However, the design of the TRIA program focuses on something entirely different and more appropriate for its purpose: the individual company. The program is structured this way to take into account the unique risk discussed above and the fact that losses are not likely to be spread evenly among a large number of insurers even in a catastrophic attack.

This is especially so in the case of terrorism because perpetrators have the ability to precisely target particular properties or assets. Hence, a single terrorism event could affect insurance companies with similar books of business in very different ways: one company might suffer no losses from the event, while another company could suffer losses sufficient to threaten its very existence. The TRIA program – through the mechanism of initial federal outlays recovered through recoupment – allows this "bet the company" risk to be spread throughout the private sector and over time in a manner that cannot be duplicated by the private sector alone.

Further, the individual company retention and co-share percentages are all set at levels with the individual companies in mind, not the overall industry. A single company's capacity to absorb losses cannot be exposed beyond a reasonable level without failing in its primary purpose – supporting the economy by protecting against non-terrorism-related losses and events. In the event of a major attack, substantially depleted reserves and surpluses, as well as insolvencies, could mean that policyholders of non-covered lines could go unprotected. A company that engages in business that endangers the ability to pay on existing or future claims is violating its duties to existing policyholders, another reason the TRIA program is designed the way that it is.

WHAT WOULD HAPPEN IF TRIA EXPIRED OR WAS MATERIALLY CHANGED?

Termination of the TRIA program threatens the space in which a viable private market for terrorism insurance has grown. In considering what is likely to happen if the program were to terminate on December 31, 2020, the immediate aftermath of 9/11 in commercial property/casualty insurance markets for terrorism coverage as described above is instructive.

The effects of a termination of the TRIA program also extend beyond the property/casualty insurance industry. As we saw, commercial development can grind to a halt in the absence of terrorism coverage if the financial institutions financing projects require the coverage as a condition of their loans. In fact, many outstanding loans that require developers to maintain coverage would be thrown into technical default if the program were terminated and if insurers had made arrangements to exclude or limit coverage in the absence of TRIA. The impact on the broader economy was one of the key reasons the program was first put into place and why it has continued to be reauthorized. Nothing has fundamentally altered this dynamic.

Similarly, it is not at all clear that scaling back the TRIA program would lead to more involvement in the market by private insurers. In fact, the opposite is likely true. Increasing the nominal amount of private-sector involvement in the current TRIA structure does not automatically translate into an increase in private-sector capital in the marketplace. Increased company retentions, co-shares, and an increased trigger level may cause market participants – particularly small- and medium-sized companies – to exit, thereby reducing total private capital. An effective terrorism loss management plan depends on participation by insurers of all sizes and structures.

UNDERSTANDING THE TRIGGER LEVEL

Consideration of just one proposed change is illustrative of this dynamic. It has been suggested that raising the event trigger level will further the goal of taxpayer protection. As a practical matter, however, a higher trigger would do nothing to reduce taxpayer exposure in the event of an attack.

The trigger level is the point at which insured losses are high enough to activate the TRIA program but does not ultimately determine the level that the program begins making initial outlays. In other words, there are scenarios in which the program is triggered and makes initial outlays for losses below the trigger level. Conversely there are scenarios in which the program is triggered and must make zero outlays.

First, consider a $200 million terrorist event involving a single, smaller insurer that writes approximately $200 million in TRIA-covered lines of business:

$200 M Event	**$200 M Trigger**
(Company deductible = $40 million)	
Program Triggered?	Yes
Insurer Losses (Deductible + Co-Share)	$72 M
Initial Government Outlays	$128 M
Mandatory Recoupment (Private-Sector Loss Sharing)	$179.2 M (140% X $128 M)
Net Gain/Loss to Fed. Government	**+ $51.2 M**

As you can see, in this specific scenario, despite the trigger level being set at $200 million, the TRIA program becomes involved after losses around $70 million. The way the TRIA program operates is based entirely on the specifics of the event and the insurance companies involved in the event.

Consider another $500 million scenario with a single impacted company with an individual retention level of $1 billion:

$500 M Event	**$200 M Trigger**	**$1 B Trigger**
(Company deductible = $1 billion)		
Program Triggered?	Yes	No
Insurer Losses (Deductible)	$500 M	$500 M
Initial Government Outlays* *Worst possible case	$0	$0
Mandatory Recoupment (Private-Sector Loss Sharing)	$0	$0
Net Gain/Loss to Fed. Government	**$0**	**$0**

Despite the program being triggered in one instance and not the other, the federal government does not make any initial outlays. Here, the trigger level has no impact. Where it does have a very significant impact is in cases involving smaller or regional insurers. Consider the same scenario for a single company with a retention level of $100 million:

$500 M Event	$200 M Trigger	$1 B Trigger
(Company deductible = $100 million)		
Program Triggered?	Yes	No
Insurer Losses (Deductible + Co-Share)	$180 M	$500 M
Initial Government Outlays	$320	$0
Mandatory Recoupment (Private-Sector Loss Sharing)	$448	$0
Net Gain/Loss to Fed. Government	**+ $128 M**	**$0**

While raising the trigger level does impact initial government outlays, we can see that ultimately, the cost to the taxpayer is not reduced. Furthermore, a $500 million loss could easily render such a company insolvent. Therefore, the only impact of raising the trigger would be on smaller, regional, and niche insurers whose deductible – and even total exposure – falls under a level set too high.

Potential exposure like this would cause these companies to pull out of markets. Because many of these smaller regional carriers play an important role in ensuring there is available coverages across lines of insurance, this would not just impact the terrorism risk insurance market but also the general insurance market. Because it is not at all clear that remaining companies could or would provide this missing coverage, the probable effect of a higher trigger would be to reduce competition by reducing the amount of total private capital allocated to all risks in certain areas.

In short, raising the trigger does nothing to reduce taxpayer exposure while simultaneously having the potential to drive private capital from the market.

WORKERS' COMPENSATION

Workers' compensation insurance is particularly challenging when it comes to terrorism risk. Workers' compensation writers are not permitted to exclude any peril from their coverages and are particularly susceptible to having highly concentrated losses in the event of a major terrorist attack. In the absence of a private-public risk-sharing mechanism, workers' compensation carriers will retreat from having highly concentrated losses in the event of a major attack. There would almost certainly be a simultaneous and significant increase in the cost of these policies and decrease in their availability for employers based in the major metropolitan areas and industries involved with, or adjacent to, symbols of America. The only way a workers' compensation writer could eliminate its terrorism exposure in high-risk markets would be to completely withdraw from those markets. In the absence of the TRIA program, or an increase in the deductibles and/or co-pays, we would expect to see a shift from the private workers' compensation writers to the insurer of last resort – usually a state fund or residual market pool, causing ripple effects throughout the business community. These public options for workers' compensation are not designed to handle a catastrophic terrorist event. Injured workers and their families would face potential disruption in benefits, delays in payment, or hardship because of the lack of an efficient compensation system.

Although individual market players may indicate willingness to take on greater exposure in the abstract, the private market has consistently demonstrated an unwillingness to accept a significantly larger portion of this potentially devastating risk, in particular when it comes to offering affordable limits to protect the solvency of workers' compensation insurers.

CONCLUSION

The TRIA program is a risk-sharing model between insurers, policyholders, and the federal government that – in addition to providing an immediate stabilizing effect in the short-term following a terrorist attack – has acted to create space for a robust private market for terrorism insurance to form where it would not have otherwise. With the TRIA program in place, the private sector has a tremendous amount of capital deployed in the terrorism risk insurance market, and, under current law, every penny the federal government pays out may be recovered. By all accounts, the TRIA program has been a tremendous success and should be reauthorized long-term without changes to the current structure.

NATIONAL ASSOCIATION OF PROFESSIONAL INSURANCE AGENTS | Local Agents Serving Main Street America℠

STATEMENT BEFORE THE U.S. SENATE
COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS HEARING
"THE REAUTHORIZATION OF THE TERRORISM RISK INSURANCE PROGRAM"

June 18, 2019

Founded in 1931, the National Association of Professional Insurance Agents (PIA National) is a national trade association that represents independent insurance agencies and their employees who sell and service all kinds of insurance but specialize in coverage of automobiles, homes, and businesses. PIA National represents independent insurance agents in all 50 states, Puerto Rico, and the District of Columbia. They operate cutting-edge agencies and treat their customers like neighbors, providing support and service. PIA National members are local agents serving Main Street America.

Background

Following the terrorist attacks of Sept. 11, 2001, the property/casualty sector of the insurance industry determined that it could not sustain an additional terrorist attack without serious financial consequences for the nation's economy. As a result, in 2002, the Terrorism Risk Insurance Act (TRIA) was written and signed into law, creating the Terrorism Risk Insurance Program (TRIP). The TRIP helped protect American "soft targets" and restore the economy by guaranteeing that the federal government would fund a substantial portion of terrorism-related losses over a predetermined amount. The TRIP was meant to serve as a temporary backstop and was set to expire at the end of 2005.

Before the Dec. 31, 2005 expiration date, the insurance industry, along with builders, lenders, realtors, and representatives from many other parts of the economy successfully made the case that the TRIP had worked well to make terrorism insurance coverage available at an affordable rate. At the same time, the private insurance market was still unable to cover losses resulting from a terrorist attack without some sort of federal backstop. After much debate, the Terrorism Risk Insurance Extension Act of 2005 was signed into law in Dec. 2005. The final bill extended the program for an additional two years and raised the loss trigger for federal assistance to $50 million in 2006 and $100 million in 2007, which increased the amount of risk taken on by insurers. In 2007, the program was again extended until Dec. 31, 2014.

2014 Reauthorization and Reforms

During the reauthorization discussion in 2014, PIA National advocated for as straightforward and long-term a reauthorization as possible. Unfortunately, the program lapsed for about two weeks at the end of the 113th Congress due to disagreement over proposed reforms to the program. However, in early 2015, the 114th Congress voted for a long-term extension of the program through Dec. 31, 2020. President Obama signed the bill into law on Jan. 12, 2015.

The program was reauthorized for six years, through Dec. 31, 2020. The previous $100 million loss trigger was gradually raised to $200 over a period of five years. The copay has been increasing by one percentage point per year, from 15 to 20 percent, between 2016 and 2020. The insurance industry's total obligation to repay the federal government for funds paid for terrorist attack losses (or "recoupment rate") was increased from $27.5 billion to $37.5 billion through deductibles and copays. Pursuant to the 2015 reauthorization, the government and policyholders cannot be made to pay more than $100 billion in losses for a terrorist attack.

The certification process for acts of terrorism, in accordance with the 2015 reauthorization, includes the Treasury Secretary, the Secretary of the Department of Homeland Security (DHS), and the Attorney General. The 2015 law also called for the creation of an Advisory Committee to encourage the creation and development of risk-sharing mechanisms for terrorism risk. The law called for an annual data collection of information from insurers on the lines of insurance covered under the TRIP, premiums earned on terrorism coverage, geographical location of exposures, terrorism insurance pricing, take-up rates, and the amount of private reinsurance purchased for terrorism risk.

2020 Reauthorization

PIA National urges Congress to pass legislation providing for a long-term, straightforward reauthorization of the TRIP. Any lapse in the program could cause serious damage to the United States economy and our national security. Congress should provide a long-term extension of the TRIP to give certainty to policyholders and the markets.

This program has succeeded due to, in part, industrywide participation, including participation by independent insurance agents. The program should be kept at a point where all companies, small and large, have an opportunity to participate. Increases to cost thresholds, including higher deductibles or a higher share of losses over deductibles, could make this program cost-prohibitive for many insurers, and PIA National cautions against the inclusion of such provisions.

The TRIP fills a large void in the market and provides a level of certainty in an uncertain time. It is critical that Congress extend the TRIP before it expires on December 31, 2020. PIA supports an extension of the TRIP well before its expiration to provide stability to policyholders and the markets.

REINSURANCE
ASSOCIATION
OF AMERICA

STATEMENT

REINSURANCE ASSOCIATION OF AMERICA

STATEMENT FOR THE RECORD

UNITED STATES SENATE
COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS

LEGISLATIVE HEARING ON

"THE REAUTHORIZATION OF THE TERRORISM RISK INSURANCE PROGRAM"

JUNE 18, 2019

The Reinsurance Association of America (RAA) appreciates Chairman Crapo, Ranking Member Brown, and other Senate Banking, Housing, and Urban Affairs (Committee) members' interest in the U.S. property casualty (re)insurance industry. Thank you for holding today's hearing on "The Reauthorization of the Terrorism Risk Insurance Program." The RAA supports reauthorization of the Terrorism Risk Insurance Program (TRIP) in advance of its December 31, 2020 expiration. The RAA thanks the Committee for beginning the TRIP reauthorization process early so that Congress can reauthorize the program and avoid a lapse.

The RAA is the leading trade association of property and casualty reinsurers doing business in the United States. Our membership includes reinsurance underwriters and intermediaries licensed in the U.S. and those that conduct business on a cross-border basis. The RAA represents its members before state, federal, and international bodies.

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Commercial insurance and reinsurance availability are key underpinnings of the U.S. economy. Insurers and reinsurers have aided in the economic recovery from significant natural disasters in recent memory, and in the wake of the September 11 terrorist attacks, were a crucial part of the recovery. Insured losses for September 11, in today's dollars, amounted to over $46 billion dollars, almost two-thirds of which were absorbed by the reinsurance industry.

Terrorism risk poses great challenges as an insurable risk because its frequency, severity, and correlation characteristics make it unlike any other insured peril or risk. As a result, Congress enacted the Terrorism Risk Insurance Act of 2002 (TRIA) to provide an essential Federal backstop that enables insurance companies to provide terrorism coverage to our nation's businesses. In our view, TRIP has fulfilled, and continues to fulfill, its purpose. By limiting insurers' exposure to catastrophic terrorism losses, TRIP has provided the stability, structure, and certainty to enable a market for insurance coverage for terrorism risk. Under TRIA and TRIP reauthorizations, the availability of terrorism risk insurance has increased. The overall U.S. terrorism insurance take-up rate is around 60%. The amount of private capacity for such risks, however, is clearly limited because of the nature of the risk, particularly with respect to Nuclear, Biological, Chemical, and Radiological (NBCR) and non-conventional exposures.

The RAA supported TRIA in 2002, and TRIP reauthorizations in 2005, 2007, and 2015. The RAA believes that TRIP is a necessary program to provide essential stability to the terrorism risk insurance market. Accordingly, the RAA supports TRIP reauthorization in advance of its December 2020 expiration with no lapse.

The RAA looks forward to working with the Chairman, Ranking Member, and other Committee members as options for TRIP reauthorization are evaluated and encourages members to study the impact on the market – businesses and insurers – before considering changes to TRIP.

Thank you for the opportunity to submit the RAA's statement for today's hearing record and for your consideration of our position.

Independent Insurance Agents
& Brokers of America.

STATEMENT OF THE
INDEPENDENT INSURANCE AGENTS & BROKERS OF AMERICA

U.S. SENATE COMMITTEE ON BANKING, HOUSING AND URBAN AFFAIRS

"THE REAUTHORIZATION OF THE TERRORISIM RISK INSURANCE PROGRAM"

JUNE 18, 2019

Founded in 1896, the Independent Insurance Agents & Brokers of America (IIABA or the Big "I") is the nation's oldest and largest association of independent insurance agents and brokers, representing more than 25,000 agency locations united under the Trusted Choice brand. Trusted Choice independent agents offer consumers all types of insurance—property, casualty, life, health, employee benefit plans and retirement products—from a variety of insurance companies. Independent agents sell nearly 80% of all commercial lines policies in the country, and our expertise and experience with businesses and the commercial marketplace affords our membership a one-of-a-kind perspective with which to speak to the topic of terrorism insurance.

The scheduled expiration of the Terrorism Risk Insurance Program Reauthorization Act (TRIPRA) at the end of 2020 is quickly approaching, and the IIABA applauds the Committee for beginning its review of the Terrorism Risk Insurance Program (TRIP) well before the scheduled expiration. Although the threat of unprovoked, unpredictable, and possibly devastating attacks continues to loom large and create complex and unique challenges for insurance providers, the existence of the TRIP has successfully helped preserve a stable and viable market for terrorism insurance. It is important to take into account that the private market capacity in existence today is available because of the TRIA program, not in spite of it.

The Terrorism Risk Insurance Program

The enactment of the Terrorism Risk Insurance Act (TRIA) in November 2002 and the subsequent establishment of TRIP were key elements of the federal government's response to the heinous and devastating attacks of September 11, 2001.

The attacks quickly produced severe disruptions in the insurance marketplace and in the broader national economy. Insurers were forced to confront the reality that large terrorism events could indeed occur and that they posed unique risks. The underwriting and pricing of these exposures proved nearly impossible due to the inability of carriers to assess and measure the likelihood and magnitude of future terrorism events, and many insurers simply stopped providing terrorism coverage to commercial policyholders as a result. The inability of businesses to secure adequate terrorism coverage also had significant and negative repercussions across broad sectors of the national economy. The commercial real estate market, for example, was acutely affected as insurance for new construction projects could not be obtained and therefore funding from lenders could not be secured.

The original enactment of TRIA and its extension in 2005, 2007 and again in 2015 successfully stabilized the insurance marketplace and helped eliminate the market disruptions and uncertainties that followed the September 11th attacks. Congress wisely crafted a reinsurance program that involves the private sector as much as possible and created a successful and limited public-private partnership that has operated at virtually no cost to taxpayers. The private sector remains solely responsible for terrorism-related losses related to personal insurance (auto and homeowners), group life, and numerous other lines of coverage._TRIP also has numerous cost sharing provisions that limit the exposure of the federal government should the worst happen and a need for the backstop arises. In fact, the federal government would be completely repaid, with significant interest, by private market participants in all but the most catastrophic scenarios.

The most recent reauthorization of TRIP in 2015 brought significant reforms and left private insurers with more "skin in the game." For instance, in the original TRIA legislation, the federal government was required to share in the industry's loss only if the losses exceeded $5 million. In 2015, when the program was last reauthorized, that trigger level had reached $100 million and was changed to increase by $20 million a year until it reaches $200 million in 2020. In addition, a per company deductible requires an insurer to pay out a portion of its claims that are directly proportional to an insurer's size (20% of commercial p-c premium) before accessing federal assistance. Furthermore, the amount paid to insurers by the federal government must be recouped at 140% (up from 133%) if the aggregate industry losses are below a certain amount ($27.5 billion in 2015 going up $2 billion a year to $37.5 billion in 2020). The Big "I" believes the significant reforms from the 2015 reauthorization strike the right balance of ensuring that the program remains stable and strong while protecting the taxpayer and that additional significant reforms are unnecessary and could significantly restrict the efficacy of the program.

The Big "I" contends that reauthorizing the public-private partnership is vitally important to maintaining the stability of the commercial property-casualty insurance markets. In the view of the IIABA, there should be a clean reauthorization of the program well ahead of the scheduled expiration date. Any possible reforms to the program should be carefully weighed against any number of negative, unintended consequences in the private marketplace and the broader economy.

Ongoing Need for TRIP

The Big "I" believes the continued operation of TRIP is essential given the persistent threat of terrorism and the unique and unpredictable nature of this devastating risk. The factors and marketplace realities that caused Congress to initially enact and subsequently reauthorize the program remain in place today. Furthermore, the marketplace outcomes that have resulted from the program's existence over the last seventeen years would be hard to improve upon.

Terrorism is also a risk that is unique from all others for several reasons. Insurers simply do not have access to the data and information to perform proper underwriting, as much of the information that does exist on planned or thwarted attacks is classified for understandable national security reasons. In addition, unlike other risks such as natural disasters, previous terrorist attacks do not provide optimal data points for the underwriting process as terrorists seek to make their attacks as unpredictable and destructive as possible.

It is also important to note that this is not an issue that affects only urban areas. In essence, any location where large crowds gather is a potential terrorist target. The most obvious examples are large buildings in major American cities, but perhaps less often noted examples are shopping malls, sports stadiums and auditoriums just to name a few. These exist all across the country, and it is for this reason that every member of Congress should be concerned about the reauthorization of TRIP.

NARAB

The Big "I" also encourages the committee to support the long-overdue appointment of a Board of Directors for NARAB. As you may recall, NARAB was authorized by Congress in 2015 as part of the TRIA reauthorization but is still not yet operational. Once operational, NARAB will be a portal that enables insurance agents and agencies wishing to join NARAB to satisfy non-resident licensing requirements across multiple states, while still maintaining state consumer protection requirements and regulatory oversight. NARAB will be a non-governmental entity overseen by a Board of Directors that is appointed by the President and confirmed by the Senate. After a lengthy process in 2016, the White House submitted a number of candidates for the Board. However, the Senate failed to confirm the nominees before the election. NARAB nominees must be resubmitted to the Senate Banking Committee, and we are hopeful that the current Administration will submit nominees without additional, significant delay.

Conclusion

The Big "I" again thanks the Committee for its leadership on this issue. IIABA believes that TRIP has worked well over the years and that the program is much-needed to maintain a stable and viable market for terrorism insurance. IIABA stands ready to assist during the reauthorization process and appreciates the Committee's consideration of our views.

WSIA WHOLESALE & SPECIALTY INSURANCE ASSOCIATION

June 18, 2019

The Honorable Michael Crapo	The Honorable Sherrod Brown
Chairman	Ranking Member
Senate Committee on Banking, Housing & Urban Affairs	Senate Committee on Banking, Housing & Urban Affairs
Washington, D.C. 20510	Washington, D.C. 20510

Dear Chairman Crapo and Ranking Member Brown:

On behalf of the Wholesale & Specialty Insurance Association (WSIA), we write in strong support of a timely reauthorization of the *Terrorism Risk Insurance Act* (TRIA.) This bi-partisan program served a critical role in enabling our economy to rebound from the attacks on September 11th and it continues to provide the backstop necessary to ensure American assets are protected against future potential incidents.

As you know, WSIA is the national association of professionals and specialty market leaders dedicated to the wholesale distribution system. Our membership consists of approximately 745 member firms, including U.S. Wholesale, U.S. Insurance Market, Associate and Service members, representing tens of thousands of individual brokers, insurance company professionals, underwriters and other insurance professionals worldwide conducting business in the U.S. surplus lines market.

TRIA was last reauthorized by Congress in 2015 and is set to expire on December 31, 2020. While the program still has over a year left on the current authorization, negotiations on new and renewal policies have already begun on contracts that overlap with the pending expiration date of the program. Time is of the essence to bring clarity to the consumers purchasing coverage and the industry members providing it.

Since its inception, TRIA has been a successful program. TRIA protects taxpayers by making the private insurance market responsible for all but the most catastrophic attacks. Failure to keep TRIA in place would result in enormous public pressure for costly, direct federal ad hoc assistance in the aftermath of a major terrorist event. TRIA has cost taxpayers nothing in loss payments and has incurred negligible administrative costs. The program has provided for the availability of private terrorism insurance in the marketplace and has kept our economy protected.

TRIA is a great example of a public-private partnership. Congress ensured that the industry was appropriately exposed to a significant share of the potential losses through reforms approved in the last reauthorization. That is why we are asking Congress to enact a multi-year reauthorization of the program as soon as possible, to provide certainty to insurers and the American public.

Thank you for your consideration,

Brady R Kelley

Brady Kelley
Executive Director

Keri A. Kish

Keri A. Kish
Director of Government Relations