# DEPARTMENT OF THE TREASURY FEDERAL INSURANCE OFFICE (FIO) ADVISORY COMMITTEE ON RISK-SHARING MECHANISMS (ACRSM) MINUTES – 30 SEPTEMBER 2019

The Advisory Committee on Risk-Sharing Mechanisms (ACRSM) convened at 1:03 pm on 30 September 2019 in the Cash Room at the U.S. Department of the Treasury, 1500 Pennsylvania Ave. NW, Washington, D.C., with Mike Sapnar, Chair, presiding.

In accordance with the Federal Advisory Committee Act, the meeting was open to the public.

### **Committee Members Present**

MIKE SAPNAR, TransRe, Chair JOHN LUPICA, Chubb EMIL METROPOULOS, Guy Carpenter WENDY PETERS, Willis Towers Watson JOHN SEO, Fermat Capital KEITH WOLFE, Swiss Re

### Also Present

LINDSEY BALDWIN, Senior Policy Analyst, FIO (Federal Insurance Office) (Designated Federal Officer)
RICHARD IFFT, Senior Insurance Regulatory Policy Analyst, FIO
STEVEN SEITZ, Director, FIO
TYLER WILLIAMS, Deputy Assistant Secretary, Financial Institutions Policy, Treasury

### **Welcome and Opening Remarks**

Director Seitz welcomed everyone to second 2019 meeting of the ACRSM. He noted that the committee was formed under the Terrorism Risk Insurance Program Reauthorization Act of 2015 to provide advice, recommendations, and encouragement to Treasury regarding the creation and development of nongovernmental risk-sharing mechanisms for protection against losses arising from acts of terrorism.

Director Seitz provided a recap of the last ACRSM meeting in August 2019, at which an update was provided concerning Treasury's engagement concerning issues respecting the potential reauthorization of the Terrorism Risk Insurance Program, as well as Treasury's recent work concerning its administration of the Program, principally addressing the reporting and data collection requirements under the 2015 Reauthorization Act. Director Seitz also noted the updates provided at the last meeting on the current state of the insurance, reinsurance, and capital markets from industry participants, and the discussions on the potential next steps for the Committee in terms of any analysis and deliverables that the Committee might produce. Director Seitz stated that the present meeting would focus more closely on the Committee's analysis and deliverables.

Chair Sapnar welcomed everyone and thanked Director Seitz and FIO for the office's continued work related to the insurance industry and work with the Committee to convene the meeting. In order to frame the discussions for the meeting, Chair Sapnar commenced by reviewing both the purpose of the TRIA, as well as the purpose of the Committee, as identified by Congressional purposes and findings as expressed the relevant legislation. The findings were:

- (1) Property and casualty (P&C) insurance, at reasonable and predictable prices, is necessary for the economy;
- (2) P&C insurers are important participants in the economy as a whole;
- (3) The P&C industry will be a major factor in allowing the economy to recover after a terrorist attack and in stabilizing the economy generally;
- (4) The September 11, 2001 Attacks gave rise to widespread financial market uncertainty, particularly as respects how the industry could handle any future terrorism events;
- (5) Failing to make available terrorism risk insurance at reasonable prices could hamper economic growth and otherwise suppress economic activity; and
- (6) The Government should step in, on a temporary basis, to permit the industry to stabilize to create a viable financial services market for private terrorism risk insurance.

Based upon those findings, TRIA created a temporary Federal program providing for a transparent system of shared public and private compensation for insured losses from terrorism, the purposes of which were to

- (1) Protect consumers by avoiding market disruptions and ensuring widespread availability and affordability of P & C insurance for terrorism risk;
- (2) Allow for a transitional period for private markets to stabilize, price, and build capacity for terrorism risk insurance, while preserving State regulation and consumer protections.

Chair Sapnar noted that the purpose of the Committee, on the other hand, is somewhat narrower. As Congress stated in the 2015 Reauthorization Act, noting again that it was desirable to encourage the growth of nongovernmental, private market reinsurance capacity for protection against terrorism losses, the Committee is charged to provide

- (1) advice;
- (2) recommendations; and
- (3) encouragement

with respect to the creation and development of nongovernmental, private risk-sharing mechanisms. Because Chair Sapnar believed it was important for level-setting purposes to review how the Program will actually operate in 2020, prior to its currently-scheduled expiration on December 31, 2020, he requested that Mr. Ifft of FIO provide such a summary to the Committee.

## Treasury Update on Terrorism Risk Insurance Program Mechanics

Mr. Ifft commenced by noting that when the Program was last reauthorized in 2015, the legislation implemented a number of changes that result in a different sharing formula over each of the six years of the current reauthorization period. He then focused upon the mechanism that will be in place in calendar year 2020, with the aid of two slides that were made part of the Committee record.

The first slide, titled "TRIP Overview: Federal Share in 2020," illustrated the general structure of the sharing mechanism. Initially, the Program is not triggered until the Secretary of the Treasury certifies an act as an "act of terrorism" within the meaning of the statute. As reflected at the bottom of the first slide, there is a \$5 million threshold of insured losses that must be satisfied before the Secretary certifies an event as an "act of terrorism." That figure has been the same since TRIA was enacted in 2002. Next, there is also a Program Trigger based upon insured losses in a particular calendar year that must be satisfied before any Federal payments can be made, even if all other conditions have been satisfied. In 2020, that figure will be \$200 million.

Assuming one or more acts of terrorism in 2020 are certified, and there have been at least \$200 million in associated insured losses, Treasury will make payments to any insurer that has met its Program deductible, which is measured for each insurer by 20 percent of its TRIP-eligible lines premium in the prior year, or in this case in 2019. The fact that the deductibles of insurers will vary by the size of the insurer is represented on the graphic by the wavy line between the insurer deductible obligation and the federal share payment. Because the deductible is based upon TRIP-eligible lines premiums earned in a particular year, an insurer's deductible will tend to increase over time as its TRIP-eligible lines premium increases.

The federal share payment, in 2020, will be 80 percent of losses sustained by an individual insurer above its deductible. This means that in addition to the amount of its individual deductible an insurer will continue to pay 20 percent of losses above the deductible, in addition to the amount of the deductible. This amount has changed each year since the Program was reauthorized in 2015, with the insurer share increasing by one percent per year.

Finally, once the payments of insurers and the federal government combined reach \$100 billion in a particular year, no further payments will be made by either the federal government or by any insurer that has satisfied its TRIP deductible for the year in question. If such payments in a year are anticipated to exceed \$100 billion, the Program rules provide for Treasury to set pro rata loss payment percentages which are designed to insure that policyholders receive equal treatment in terms of any insured loss payments to which they are entitled.

Mr. Ifft then discussed that although the Program does not impose a charge for the protection that it provides, the Government either must, or may, recover the payments that it may make in connection with the Program. This "recoupment" mechanism was illustrated in the second slide, titled "TRIP Overview: Recoupment." The important figure in this calculation is the Insurance Aggregate Marketplace Retention Amount, or IMARA. Although that figure has been a certain amount set by TRIA up through 2019 (and is \$37.5 billion in 2019), in 2020 the IMARA shifts to

an amount that represents the three-year average of aggregated insurer deductibles. The precise figure will be based on actual industry premium figures which Treasury has collected in its annual data calls. Mr. Ifft stated that the 2020 number will be released by Treasury before the end of CY 2019, although he noted that in light of the data that has been collected the figure will be above the 2019 statutory figure of \$37.5 billion. Like the individual insurer deductibles, beginning in 2020 the IMARA will be a dynamic figure that will tend to increase in association with the general increase in industry premium figures over time.

To the extent that insurance industry payments (for deductibles and co-pay amounts combined) are less than the IMARA in a particular year, Treasury must recoup any payments that it makes, at least up to the IMARA amount, at a rate of 140 percent of its expenditures. This is called the mandatory recoupment amount. Once the IMARA has been satisfied, through either insurer payments or mandatory recoupment amounts, Treasury can recoup any additional amounts that it has expended on a discretionary basis. The Program rules identify the considerations that Treasury will take into account in determining whether to recoup any payments on a discretionary basis. In either case, Treasury recoups payments through a surcharge that Treasury will determine (in an amount and for a period that results in the collection of the appropriate amount of money), which it then directs all insurers to impose upon all TRIP-eligible lines policies for the period in question. Treasury imposes the surcharge upon all such policies regardless of whether the policyholder had any terrorism losses or whether it even purchases terrorism risk insurance. Insurers then remit those amounts to Treasury on a rolling basis as they are collected.

# Presentations by Committee Members and Discussion

The meeting then moved to presentations by individual committee members addressing the areas on which they are working and which will form the basis of their future work with the ACRSM.

Mr. Sapnar observed that TRIA has been effective in getting the market to where it is today. Before discussing specific issues on how to further increase private risk sharing, however, he stated that the Committee should look at how the program has performed in the past to move risk to the private sector, and how it will perform in the future if it were to continue in perpetuity, because the mechanisms are dynamic and the risk changes over time.

Chair Sapnar performed this review by reference to another series of slides (now part of the Committee record), illustrating the manner in which the Federal Share has declined on account of changes to the program from its inception in 2003 and then how it will gradually continue to decline after 2020, even if the Program were reauthorized after 2020 with reference to the same sharing formula that will be in place in CY 2020. Chair Sapnar noted that insurers will have increased retained risk through their deductibles and copay obligations relative to their policyholder surplus. He also observed that policyholders continue to run a significant amount of economic risk under the Program, on account of both the recoupment mechanism as well as potential application of the Program Cap.

The slides illustrated different results depending upon various industry premium growth assumptions; the base case presented assumed annual premium growth of five percent, but the

analysis also showed the result based upon a growth rate of three percent, which Chair Sapnar indicated might be closer to United State Government growth projections.

The 2003 baseline case, during the first year of Program operation, reflected a composite industry/government share of 19 percent/81 percent for an assumed maximum loss of \$100 billion, in light of the initial deductible and copay share obligations, with the government having the ability to recoup some or all of the \$81 billion that it paid through assessments on policyholders.

By comparison with today (2019), the slides illustrated that this 19/81 share had moved to almost a 50/50 sharing between the private sector and the government, with the government still retaining the right to assess recoupment against policyholders. At this time, the individual insurer deductibles have increased to 20 percent (almost three times the initial deductible of 7 percent), and the co-pay share is at 19 percent, which is almost double from where the Program stated in 2003.

These figures assume a five percent annual increase in premium growth, which Chair Sapnar noted could be debatable. He indicated that he would not expect it to be much higher than that, and it could certainly be lower. In any event, using the five percent growth figure, it can be seen how the private sector share gradually starts to move up; in 2020, it is projected to be 53 percent in the private sector and a 47 percent federal share, again based upon a hypothetical \$100 billion loss. He then reviewed a slide illustrating CY 2022, showing a 55 percent private share and 45 percent government share based upon the growth in deductible and retention obligations, Moving forward, the private share continues to increase such that by the time we reach 2030, 71 percent would be in the private sector, and only 29 percent would be subject to federal payments, which would then still be subject to recoupment.

All of these figures are based upon static sharing percentages; Chair Sapnar noted that if the copay share percentage and insurer retention percentage increase as well, the government share shrinks even further as time passes.

Concluding his review of the slides, Chair Sapnar stated that there will be, year over year, a significant increase in risk sharing in the private sector under the current structure of the Program. If a three percent growth rate is used instead to make the projection, the numbers are not as dramatic, but even using this lower growth assumption a risk share of 63 percent in the private sector and 37 percent in the public sector is indicated. As you would expect, using a figure in the middle of four percent results in a sharing split in the middle as well. Chair Sapnar indicated that the Committee would be evaluating a number of potential changes, but even as currently set up the existing mechanics of the Program ensure that there will be a significant increase in private risk sharing moving forward, even in the absence of any further changes.

Chair Sapnar then announced that the Committee would be considering five issues in particular, initially at a subcommittee level, that he would outline in broad terms, and would then ask each of the respective subcommittee heads to comment on their current general observations and the issues they would be reviewing. That evaluation still involves the collection of further information and development of analysis, although he did emphasize that the relevant issues

have been identified and the subcommittees were now drilling down on where the focus should be on those issues. He acknowledged that there are many different aspects to look at in the Program, ranging from its administration to post-event operations, although observed that we have been fortunate in that the working of the Program to date has been in an environment where the Program has not yet been triggered. He indicated that the evaluation would certainly look to the ramifications presented if the Program was triggered for federal payments and potential recoupment of such amounts.

Chair Sapnar identified the five general categories for further subcommittee examination as follows:

- (1) The renewal and reauthorization of the legislation, particularly with respect to the time period of any reauthorization;
- (2) The current mechanics of the Program and whether they should be changed at all;
- (3) The issues associated with nuclear, biological, chemical, and radiological exposures, commonly known as NBCR, that are associated with the Program;
- (4) Cyber terrorism risk that falls under the Program, and as part of that, the Program certification provisions; and
- (5) The use of prefunding approaches in connection with the Program (there is no explicit upfront charge for the Program as it currently stands).

Chair Sapnar then invited Mr. Wolfe to address the issues presented by reauthorization of the Program and the length of any reauthorization.

Mr. Wolfe discussed the evaluation by his subcommittee of the issues present by the general decision of whether to reauthorize the Program or not, and if reauthorized the period of any reauthorization. His presentation was contained within two draft discussion documents, which were made a part of the Committee record. The first document addresses the potential issues presented by potential non-renewal or anticipated expiration, while the second addresses the potential length of any reauthorization.

Regarding the issue of non-renewal of TRIA, Mr. Wolfe advised that the existing information (identified in the draft document) indicated non-renewal could lead to some insurers withdrawing from the market, with any remaining insurers raising rates considerably. He indicated that the available information was from research conducted during the prior reauthorizations of the Program, although he believed that this information was still valid research for purposes of the present inquiry. He also indicated that another consequence of non-renewal of TRIA could be a strong negative impact on the economy. Mr. Wolfe noted that the best example supporting this, as seen during some of the prior reauthorization debates, was around long-term construction projects and the inability of some of those projects to secure both insurance and financing as the reauthorization debates became contentious and the potential expiration of the Program approached.

Mr. Wolfe then proceeded to review his second draft document, which addressed the potential duration of any reauthorization of the Program. This document explores possible short-term reauthorizations (characterized at between one to five years), a longer-term reauthorization (five to ten years), and finally a permanent Program. The document identifies pros and cons

associated with each of these areas. In general, Mr. Wolfe indicated that his current belief was that there are more significant stability benefits created the longer the period that the Program is reauthorized. He also noted, consistent with Chair Sapnar's presentation, that the government financial burden continues to decrease with the length of that period of reauthorization, using assumptions concerning premium growth over time as have been presented. Mr. Wolfe did note, however, that on the drawback side a longer reauthorization obviously makes it harder to make changes as circumstances might change over time. In that regard, he noted that cyber is a good example of this, as a risk that was not even significantly contemplated at the enactment of the Program in 2002 (he deferred to the later presentation concerning cyber for more details on that issue).

Chair Sapnar then discussed his own subcommittee's evaluation of the existing Program mechanics and how changes in those mechanics could affect the Program. He indicated that the individual mechanics would be examined in light of dynamic modeling showing how changes would affect the proportionate risk sharing between the private and public sectors, and how the current mechanics affect various Program participants, either positively or negatively. He indicated that the goal of the subcommittee's analysis would be to maximize the efficiency of the Program without providing any preferential benefits for any segment of the industry, with the ultimate aim of making the Program as fair as possible to all constituents.

Chair Sapnar observed that there many types of events that the subcommittee could examine in connection with the potential ramifications around putting additional limits on the Program, or altering the existing deductibles and copay amounts. He also noted that there remained uncertainty as to how TRIA would operate if triggered by an actual loss situation, which has not yet happened. He indicated that, ultimately, the subcommittee would be looking to obtain a better understanding of the different things that might happen and how the Program would respond in connection with them, and whether there are ways in which to modify those mechanics so that the Program runs smoothly should there be an event -- from a triggering standpoint, a recoupment standpoint, a payment standpoint, and then a post-event standpoint to make sure that there remains sufficient market capacity to insure a continuing stable environment.

Chair Sapnar then requested Mr. Metropoulos to discuss his subcommittee's evaluation of the manner in the Program addresses losses arising out of nuclear, biological, chemical, and radiological (NBCR) events, with specific reference to workers' compensation (WC) losses (as such NBCR exposures must be covered under WC policies as a matter of state law. Mr. Metropoulos also used a series of slides in connection with his presentation, which slides have also been made part of the Committee record.

Mr. Metropoulos noted initially that NBCR losses are treated the same as any other losses under the Program; there is no difference in terms of how the Program covers NBCR versus conventional losses. In that sense, he observed that his slide on the operation of the Program for NBCR was basically the same as the Treasury slides previously presented. The principal difference is that the magnitude of the losses with respect to NBCR could be much, much larger than losses arising from conventional events.

In general, Mr. Metropoulos stated that TRIA provides up to nine levels of policyholder and insurer retentions that provide protection to U.S. taxpayers. It has supported the private reinsurance market in providing needed capacity for the last 18 plus years. He then reviewed certain conclusions from FIO's June 2018 Report on the Effectiveness of the Terrorism Risk Insurance Program in terms of the extent of private reinsurance availability. As noted by the Report, reinsurance purchased for terrorism risk remains subject to limitations and exclusions, most typically for exposures specific to NBCR, where the limits are much less. Mr. Metropoulos recited the figures from the Report indicating that reinsurance limits for property, liability, and workers' compensation losses involving NBCR-related risks were far lower than the available limits identified for conventional risks -- specifically, that the Report identified that \$92.2 billion of total per loss reinsurance limits were purchased for all terrorism risks, versus only \$17.5 billion for NBCR losses subject to TRIP. This reflects only roughly 19 percent of all reinsurance limits would be available for NBCR relative to all terrorism losses. At the same time, Mr. Metropoulos noted that although TRIA requires participating insurers to offer insurance for terrorism risk on the same basis as for other perils, it does not require such insurance to be offered for NBCR exposures, for which coverage is generally not provided or specifically excluded.

Mr. Metropoulos acknowledged that the FIO Report findings demonstrate that private reinsurance capacity for terrorism risk has improved significantly since the September 11, 2001 Attacks, but stated his view that this capacity remains contingent upon the TRIA backstop remaining in place. Even with the existence of TRIA, it is clear from the FIO Report that regardless of the amount of direct coverage available for NBCR exposures, that coverage is less likely to be supported by the private reinsurance market relative to losses arising from conventional terrorism. He also noted that with respect to the reinsurance that has been obtained for NBCR exposures, a large portion of it was obtained by captive insurers which, while potentially significant on an individual basis, represents only a small percentage of total risk exposures assumed by insurers participating in the Program.

Mr. Metropoulos stated the aggregation risk presented by terrorism continues to be a limiting factor on the development of private reinsurance capacity, as does the difficulty in modeling potential NBCR exposures from both the frequency and the severity standpoint. This conclusion is borne out by commenters cited by FIO, including state regulators, stating that while there is generally sufficient private reinsurance capacity to support the conventional terrorism market, there was not sufficient private reinsurance capacity for the catastrophic terrorism risk exposures covered by the Program. Such catastrophic terrorism risks are presented not only by NBCR exposures, but also by so-called "Tier 1" city risks (New York, Washington, D.C., Chicago, San Francisco, and Los Angeles), and by workers' compensation risks more generally.

In his next slides, which addressed take-up rates for terrorism risk insurance, Mr. Metropoulos reviewed the take-up rates identified in the June 2019 FIO Report on Small Insurer Competitiveness in the Terrorism Risk Insurance Marketplace. Because primary workers' compensation policies must provide coverage for terrorism risk as a matter of state law, the effective take-up rate for workers' compensation is 100 percent. The take-up rates for policies written by small insurers were generally lower than those of non-small insurers. Figures 11 and 12 from the 2019 FIO Report identify take-up rates on a state-by-state basis for all lines

excluding workers' compensation (i.e., property and liability risks), ranging between 55 and 70 percent.

Mr. Metropoulos also reviewed the findings of the Marsh 2019 terrorism report, which identified similar take-up rates, and which identified an overall average countrywide take-up rate for non-workers' compensation coverage at 60 percent. However, in certain large cities in the northeast, the take-up rate can approach 75 to 80 percent. For purposes of further evaluation, Mr. Metropoulos indicated that he would be generally using a 60 percent assumed take-up rate for NBCR based upon these various sources.

Mr. Metropoulos then discussed the results of a study (also set forth in his slides) conducted by Guy Carpenter on the efficacy of private market for capital for terrorism risk, and specifically for NBCR terrorism risk, in the reinsurance market. This study was recently made public during Marsh's testimony before the U.S. Senate Banking Committee TRIA Reauthorization Hearing on June 18, 2019. On the left hand side of the chart illustrating the analysis is shown the total private industry capital, from AM Best, which is estimated at \$779 billion of property and casualty (P&C) insurance and reinsurance-dedicated capital. This is for all perils, all lines of business. This is then reduced to an estimated \$440 billion of global reinsurance dedicated capital. The analysis is performed on a global basis because global reinsurers can reinsure U.S. terrorism risks, whether for NBCR or conventional terrorism.

The analysis then moved to the estimated reinsurance dedicated capital specific to North America. According to Mr. Metropoulos, the estimated range, based upon Guy Carpenter sources and interpretation of AM Best data, is that there is an estimated range of between \$120 billion to \$140 billion of dedicated capital specific to North America. That is not just for terrorism, but for all North American perils. When that figure is compared to large loss scenarios with respect to terrorism, the amount can be placed into context. For example, the losses associated with the September 11, 2001 Attacks, in 2018 adjusted dollars, were about \$46.3 billion.

Of that \$46.3 billion, only \$12 billion of it is specific to workers' compensation and property, or about 25 percent of the total. The other lines of business are group life and various liabilities as well as business interruption.

Mr. Metropoulos then considered what current large modeled conventional terrorism losses reveal, using the latest RMS industry exposure database. A ten-ton truck bomb exploding in Los Angeles, the largest conventional loss in the current model today, is estimated at about \$44.8 billion, roughly the same amount of the September 11 losses in adjusted dollars. This suggests, according to Mr. Metropoulos, that the reinsurance industry, with the support of the Program, may be adequately capitalized for these largest conventional attacks.

Mr. Metropoulos indicated that the picture is different when NBCR losses are considered. He then reviewed RMS modeled losses greater than \$100 billion (the amount of TRIA's overall cap), and found that there are 77 losses associated with a nuclear event resulting in more than \$100 billion in losses, the largest being a nuclear event in New York City, in midtown New York, estimated at about \$625 billion.

This is again is considering workers' compensation at a 100 percent take-up rate, and property at a 60 percent take-up rate. Of those 77 events, 26 of them are in excess of \$200 billion dollars. Looking at biological losses (and specifically anthrax, which results in the largest biological modeled loss), there are 282 losses, the largest of which is at \$508 billion, again in New York City. Chemical losses seem to be somewhat lower; e.g., the largest loss is at \$15 billion. Radiological losses above \$100 billion (nine events in total) are generally clustered between \$100 billion and \$108 billion, with the highest \$108 billion loss also located in New York City.

The upshot of this evaluation, Mr. Metropoulos concluded, was that although the reinsurance industry may be adequately capitalized for conventional losses, it is clearly not adequately capitalized for the largest of NBCR losses. Using the AIR modeling, instead of RMS modeling, generates similar results, and again a number of resulting losses are in excess of the \$100 billion cap.

Mr. Metropoulos then discussed in more general terms overall conditions in the reinsurance market. As reflected in the associated slide, the combined maximum property and workers' compensation conventional capacity for direct insurance is estimated at about \$2 billion. For reinsurance treaty capacity (workers' compensation and property in combination), it is estimated at about \$1.5 billion per program. However, this is an ideal and a theoretical maximum, and will not be available in all situations.

When insurers have significant accumulations in Tier 1 cities (New York, Chicago, San Francisco, Los Angeles, and Washington, D.C.), they should expect to have notably less access to reinsurance capital relative to those portfolios that have exposure outside of Tier 1. Similarly, reinsurance capacity for coverage including NBCR, especially in Tier 1 and the central business districts of Tier 1, has become increasingly challenging to secure.

There are accumulated terrorism aggregate constraints as well. Aggregates have somewhat been consumed by those select carriers that have already obtained the limited NBCR capacity that exists in the market. There are ratings agency implications for those carriers that include and cover NBCR, which includes the reinsurers themselves.

Mr. Metropoulos noted that there continues to be some NBCR retrocessional capacity (that is, reinsurance in favor of the reinsurers). However, it is important to realize that several key global reinsurers and reinsurance markets will not cover NBCR. With respect to NBCR and capacity on an individual program basis, the estimate for direct insurance is around \$700 million to \$800 million per program. For reinsurance treaties (again, for workers comp and property in combination), the per program capacity figure is estimated to be between \$400 to \$800 million per program. Mr. Metropoulos cautioned that these estimates again represent theoretical maximums per program, and these estimates also assume that the federal terrorism insurance backstop through TRIA continues to remain in its current form, or in a very similar form.

Mr. Metropoulous then identified what would likely happen if TRIA were to expire in 2020, or to be reauthorized subject to notable increases to the obligations of insurers that are not supported by the backstop. Initially, he indicated that it would be likely that multiple carriers

will simultaneously enter the private reinsurance market. The impact that this would have on the aggregate (re)insurance sector and market pricing is uncertain. He observed that while the current reinsurance market demand has been relatively balanced over the last several years, with the industry adding capacity at a measured pace, it could quickly become unbalanced on account of large numbers of insurers seeking additional reinsurance capacity at the same time, leading to market and economic disruption.

Based upon the foregoing market conditions and considerations, as respecting NBCR, Mr. Metropoulos indicated that his subcommittee should be examining the following issues:

- (1) Should NBCR events be treated differently from conventional events under TRIA? This could include consideration of possible bifurcation of treatment of NBCR events (either individually, and/or in conjunction with workers' compensation events).
- (2) As the insurance marketplace aggregate retention amount (or IMARA) is now indexed to premium growth beginning in 2020, which will decrease the scope of the federal backstop, should consideration be made to limit the IMARA increases specific to NBCR losses?
- (3) How should TRIA reuthorization address the growing NBCR risk over the existing \$100 billion cap? The program cap has remained unchanged in dollar amount since 2003, notwithstanding unlimited workers' compensation exposures that remain a liability to all employers via statutory law for NBCR, and notable increases in property total insured values and business interruption exposures since 2003. There is also rating agency attention for these large potential NBCR losses, which is expected to increase in the future.
- (4) Consideration of bifurcating the insurer deductibles and co-shares under TRIP differently for NBCR events versus conventional terrorism events?
- (5) Analysis of how state "fire following" laws affect NBCR exposures. This is recognized to be a very challenging area, but further analysis could help the understanding of what portion of NBCR property modeled losses may be insured and uninsured on account of state insurance statutes.
- (6) Consideration of the role of captive insurers being formed to cover NBCR exposures under TRIP, and their impact on potentially transferring that risk to the market overall through the mandatory recoupment mechanism (as compared with conventional insurers, where more of the risk remains with the insurers through their TRIA deductibles).

In response to Mr. Metropoulos' presentation, Chair Sapnar inquired as to whether the \$440 billion capital figure included both traditional reinsurance as well as alternative capital. Mr. Metropoulos confirmed that the figure consisted of \$385 billion of traditional reinsurance and \$95 billion of alternative capital. He also observed, however, that there are certain limits and challenges presented by the availability of alternative capital for NBCR-related risk, such that the \$440 billion figure could be somewhat overstated in that regard.

Mr. Seo also inquired, respecting potential reauthorization, to confirm that the Mr. Metropoulos' presentation contemplated that the subcommittee would be considering potential changes in the

retention structure after a first NBCR event – that is, not necessarily changing the mechanics of the Program until there has been some reaction to a first NBCR event. Mr. Metropoulos confirmed that this was the case and that TRIA should be evaluated with the dual purpose of how it stabilizes the market both pre-event and post-event, such that it remains a significant consideration how the market will react after an event has taken place. Mr. Seo suggested it was important to consider this generally, and not simply with respect to NBCR – so not bifurcating the discussion solely between NBCR and conventional terrorism risk, but between any first event/second event losses. Mr. Metropoulos acknowledged that this would be considered as well.

Chair Sapnar then invited Mr. Lupica to discuss his subcommittee's evaluation of how the Program currently addresses cyber-related losses, and the certification issues posed by such losses. He framed the discussion in connection with three issues: (1) Clarification that cyber-related losses paid under cyber liability insurance policies and property and casualty policies are covered and reimbursed under TRIA; (2) clarification that that TRIA will apply to cyber attacks causing financial and economic loss to U.S. entities, wherever they take place and whether they cause damage within or outside the United States; and (3) clarification and improvement of the certification process as it applies to cyber losses, with further definitions, time frames, and notification requirements.

Concerning these issues, Mr. Lupica indicated that the subcommittee would be examining such matters as the intent necessary for certification and the nature of any attribution to be required, and a more defined timeline associated with the process. The subcommittee would also be looking at the coverage of cyber losses both inside and outside the United States, so long as U.S, entities are affected and there have been damaging effects to the tangible and intangible property and infrastructure of those U.S. entities within or outside the United States.

Chair Sapner indicated that Mr. Driscoll (absent) and Mr. Seo would be leading subcommittee consideration of possible approaches to moving to some sort of pre-funded system for the Federal Share exposure, as distinguished from the current recoupment system which only collects funds associated with the loss after it has taken place. Mr. Seo advised that upon conferring with Mr. Driscoll they are in agreement that their research should focus upon looking at other programs that are associated with state or federal governments that have engaged in significant risk transfer operations.

In that regard, Mr. Seo observed that there are more examples of this recently than was the case at the time of prior reauthorizations, and, thus, the Committee now has the benefit of those experiences, and can examine their applicability or non-applicability to the situation presented by TRIA. Mr. Seo noted that the Program is obviously not set up at present to charge the sort of premiums necessary for pre-funded risk transfer to the private market, although he stated that this does not mean that the issue should not be examined carefully, through the lens of existing experiences, as a base for the research. Mr. Seo also advised that the subcommittee would identify all programs and mechanisms they were examining and would coordinate to make certain that the Committee as a whole believes the listing to be complete.

Upon confirming that none of the other Committee members had any further questions or comments, at 1:55 pm Chair Sapnar concluded the meeting.

I hereby certify these minutes of the September 30, 2019 Advisory Committee on Risk-Sharing Mechanisms public meeting are true and correct to the best of my knowledge.

Mike Sapnar Chair

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