**DEPARTMENT OF THE TREASURY**
**FEDERAL INSURANCE OFFICE (FIO)**
**ADVISORY COMMITTEE ON RISK-SHARING MECHANISMS (ACRSM)**
**MINUTES –12 AUGUST 2019**

The Advisory Committee on Risk-Sharing Mechanisms (ACRSM) convened at 1:30 pm on 12 August 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
KEAN DRISCOLL, AIG
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 Regulatory Insurance Policy Analyst, FIO
BIMAL PATEL, Assistant Secretary, Financial Institutions, Treasury
STEVEN SEITZ, Director, FIO
TYLER WILLIAMS, Deputy Assistant Secretary, Financial Institutions Policy, Treasury

**Presenters**

JON BERGNER, NAMIC
ROBERT GORDON, APCIA
FRANK NUTTER, RAA
STEF ZIELEZIENSKI, APCIA

**Welcome and Opening Remarks**

Director Seitz welcomed everyone to the first 2019 meeting of the ACRSM. He provided a brief background on the ACRSM, which 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 non-governmental risk-sharing mechanisms for protection against losses from acts of terrorism.

The ACRSM's work was highlighted in Treasury's October 2017 Report on Asset Management and Insurance, which encouraged the ACRSM to consider how to increase private market participation in the terrorism risk insurance marketplace with the goal of providing enhanced taxpayer protection in a way that does not result in market dislocations for either consumers or the providers of terrorism risk insurance.

Director Seitz stated that the ACRM's membership has changed since the last meeting in 2017, and introduced new members John Lupica, Vice Chairman of Chubb and President of its North American Major Accounts and Specialty Operations, and Emil Metropoulos, Senior Vice President of Guy Carpenter and leader of its Workers' Compensation and Terrorism Specialty Practice. In addition, Mike Sapnar, the President of Transatlantic Reinsurance Company, agreed to serve as Committee Chair for the next period of operation. Director Seitz thanked Wendy Peters of Willis Towers Watson for serving as Committee Chair for the first two years of operation, and confirmed that Ms. Peters will continue to serve on the Committee.

Director Seitz summarized the Committee's previous work. The ACRSM held several organizational meetings then formed five subcommittees: Direct Reinsurance, Reinsurance, Capital Markets, Other Insurance and Reinsurance Approaches to Terrorism and Other Catastrophic Risk Exposures, and Consumer Interests. The ACRSM decided to hold four meetings to consider information related to direct insurance, reinsurance, capital markets, and other (re)insurance approaches to terrorism risk. Consumer interests would be addressed in each meeting.

To date, the ACRSM has held three meetings: those related to direct insurance, other (re)insurance approaches to terrorism risk, and capital markets. Materials from these meetings are available on the ACRSM website. The ACRSM has not yet held a meeting focusing on the reinsurance market.

Chairman Sapnar welcomed everyone and thanked Director Seitz and FIO for the office's continued work related to the insurance industry and working with the Committee to convene the meeting. He introduced Treasury's Assistant Secretary for Financial Institutions, Bimal Patel, and the Deputy Assistant Secretary for Financial Institutions, Policy, Tyler Williams. Chairman Sapnar also confirmed that this was Director Seitz's first ACRSM meeting as FIO's Director. Chairman Sapnar then welcomed new members Mr. Lupica and Mr. Metropoulos, and confirmed that two additional individuals have pending appointments to the Committee. Chairman Sapnar then introduced returning ACRSM members, Ms. Peters, Keith Wolfe of Swiss Re, Kean Driscoll of AIG, and John Seo of Fermat Capital.

**Treasury Update on Terrorism Risk Insurance Program Activities**

Chairman Sapnar introduced Assistant Secretary Patel to provide an update on Treasury's engagement efforts concerning the reauthorization of the Terrorism Risk Insurance Program (TRIP), which expires on December 31, 2020.

Assistant Secretary Patel reported that at the end of 2018, Treasury identified six issues likely to be of interest to stakeholders in reauthorization discussions. The issues were originally identified by FIO and evaluated by Treasury leadership as relevant and appropriate for any likely debate over reauthorization. The six topics were:

1. The length of any reauthorization.
2. Potential changes in the mechanics of the program (i.e., sharing percentages between the public and private sectors).
3. Changes to the Program Trigger (which will be $200 million per calendar year in 2020).
4. Changes to the Program relating to terrorism risk insurance for nuclear, biological, chemical, and radiological (NBCR) exposures.
5. Changes to the Program relating to cyber coverage.
6. Whether any changes to the Program towards a pre-funding mechanism should be considered.

Assistant Secretary Patel added that Treasury issued guidance in 2016 stating that cyberterrorism coverage can be written within the scope of the Program assuming it is written in lines of insurance subject to the Program, although no specific provision in the Terrorism Risk Insurance Act (TRIA) or the TRIP regulations currently address cyber coverage subject to the program.

FIO and Treasury met with a large number of stakeholders, including policyholder representatives, direct insurers participating in TRIP, commercial reinsurers that provide support to direct insurers with terrorism risk exposure, state insurance regulators and the National Association of Insurance Commissioners (NAIC), insurance rating agencies, and public policy think tanks.

Assistant Secretary Patel stated that Treasury evaluated the views and analyses expressed during these meetings and found them helpful in developing Treasury's views on Program reauthorization (which remains ongoing). Assistant Secretary Patel confirmed that Treasury looks forward to participating in upcoming discussions about Program reauthorization and being a resource for policymakers in their deliberations about reauthorization.

Mr. Ifft provided an update on the results of Treasury's most recent TRIP data call. As background, he said that the 2015 Reauthorization Act requires the Program (through FIO) to collect data on the terrorism risk insurance market and use this data to prepare annual reports to Congress on TRIP. Treasury's two most recent reports were the 2018 Program Effectiveness Report and the 2019 Small Insurer Report. The Small Insurer Report was provided to Congress on June 28, 2019. Both reports are available on the TRIP website.

Mr. Ifft described FIO's data collection process, which uses different collection forms depending on the type of responding insurer. The four types of insurers are:

1. Small insurers below a certain premium threshold.
2. Insurers above the premium threshold (identified as "non-small insurers").
3. Alien surplus lines insurers.
4. Captive insurers.

Mr. Ifft said that FIO has sought to minimize year-over-year changes to the data templates to improve data collection and reporting efficiency. Mr. Ifft added that Treasury has reporting exemptions for small insurers writing very limited amounts of TRIP-eligible lines premium, and captive insurers that write insurance in TRIP-eligible lines but do not provide terrorism risk coverage. All other entities are required to respond pursuant to the 2015 Reauthorization Act and Treasury regulation.

Mr. Ifft said that for the last two year, FIO has worked with state insurance regulators and the NAIC to establish a consolidated data call, with the goal of having the call satisfy the regulatory needs and objectives of both federal and state officials. He said that this coordination has reduced the reporting burden on participating insurers, and added this burden is further reduced because FIO obtains most of the data call's workers' compensation data from the National Council of Compensation Insurers, the California Workers' Compensation Insurance Rating Bureau, and the New York Compensation Insurance Rating Board.

FIO uses an outside data aggregator to collect and aggregate data in a consolidated anonymized format, as required under the 2015 Reauthorization Act. FIO uses this data as the basis for its report analyses and does not seek information on particular identifiable insurers.

Mr. Ifft summarized the findings of the 2018 Program Effectiveness report, which provided an overview of the Program and information analysis on the statutory topics outlined in the 2015 Reauthorization Act. The findings were as follows:

- The Program generally has been effective in making terrorism risk insurance available and affordable in the insurance marketplace.
- Treasury's 2016 and 2017 data indicate that the market for terrorism was relatively stable over this two-year period, with few observable differences in benchmarks such as price and take-up rate.
- FIO did not observe any aspects of the Program which have the effect of discouraging or impeding insurers from providing property & casualty insurance (in general) or coverage for acts of terrorism specifically.
- The Program remains an essential component of the market for workers' compensation, because under state law, workers' compensation insurance must cover terrorism risk, is not subject to limits of liability, and can not exclude causes of loss posing extreme aggregation risk.

Mr. Ifft said that the 2015 Reauthorization Act requires Treasury to include in each program effectiveness report an estimate of total earned premiums for terrorism risk insurance since the inception of the program in 2003. FIO determined that, for the period of 2003 to 2017, this figure was approximately $37.6 billion, excluding premiums paid to captive insurers. This equals between 1 and 2 percent of total premiums earned in TRIP-eligible lines of insurance during that time period.

Mr. Ifft summarized the findings of the 2019 Small Insurer Report, which focused on the competitiveness of small insurers in the terrorism risk insurance marketplace. FIO observed that the results of the 2019 TRIP data call were generally consistent with FIO's observations on the terrorism risk insurance marketplace made in the 2018 Program Effectiveness Report. In addition, the findings were as follows:

- Small insurers remain significant participants in the U.S. terrorism risk insurance market, but their market share has declined slightly over the last decade (as compared to larger insurers).
- FIO analyzed the differences between the market participation of small insurers and larger insurers. Mr. Ifft referred attendees to the small insurer report for more details.
- The mandatory availability requirement potentially causes small insurers (in some instances) to offer and write terrorism risk insurance when they might not do so otherwise. The financial backstop provided by TRIP provides support to mitigate the economic impact of this requirement. If the federal backstop becomes insufficient because of changes in market conditions or Program mechanics, the mandatory availability requirement could cause small insurers to withdraw from certain markets. This could reduce the overall availability of insurance in TRIP-eligible lines of insurance generally (and not just in connection with the provision of terrorism risk insurance).
- In some circumstances, the Program Trigger (which requires the government share not be paid until there are at least $180 million insured losses in 2019) could prevent some insurers who have met their individual insurer deductibles from receiving the federal share of compensation. Treasury's data calls indicate that although some insurers may purchase reinsurance to avoid this potential risk, some do not purchase sufficient private reinsurance to fully address the issue. Small insurers do proportionately cede more (than large insurers) of their premium for the purchase of reinsurance. Small insurers have increased their reinsurance purchases covering terrorism since Treasury began collecting data, however reinsurance protection for terrorism risks arising from nuclear, biological, chemical, and radiological events is much more limits than other types of terrorism risk reinsurance.
- The potential risk of un-reimbursed losses faced by in small insurers is most consistent in workers' compensation, which is not subject to limits of liability and poses significant aggregation risks. The price that insurers can charge for workers' compensation coverage is highly regulated, and insurers may find it difficult to afford reinsurance to cover their underwritten risk, particularly for nuclear, biological, chemical, or radiological losses.

Mr. Ifft concluded by stating that FIO's 2020 Program Effectiveness Report must be submitted to Congress by June 30, 2020. This report will address FIO's 2019 data call (which was completed this year) and the results of the 2020 TRIP data call.

**Direct Insurance Market Update**

Robert Gordon, head of the Policy Reinsurance, International Division for the American Property Casualty Insurance Association (APCIA), presented an update on the direct insurance market and the availability of terrorism coverage. Mr. Gordon said that APCIA represents nearly 60 percent of the primary and reinsurance marketplace in the United States. Mr. Gordon served as the main insurance counsel for the House Financial Services Committee during the initial drafting of TRIA and worked with several of the Program's reauthorizations.

Mr. Gordon reported that most of APCIA's members find the current terrorism insurance marketplace to be relatively stable, but added it is helpful to understand the Congressional intent of TRIA. These Congressional findings/goals were:

1. The importance of having insurance available.
2. The importance of a stable property/casualty insurance industry.
3. The ability of the economy and industry to maintain stability after a terrorism event.
4. The U.S. government should provide compensation for terrorist attacks while the private sector develops its own mechanisms.

Mr. Gordon then discussed these findings in detail. First, TRIA has been extremely successful at making terrorism insurance available.

Second, TRIA has a mixed record in keeping insurers stable. Mr. Gordon said the results are mixed because as the Program Trigger increases, smaller insurers are put at a growing risk of being pushed out of the marketplace (and a market share decline has been seen). Increasing deductibles also make large insurers less likely to receive any protection. He added that while the Program helps protect solvency, the credit ratings of insurers could decrease following major event(s) that destabilize large portions of the industry.

Mr. Gordon said APCIA's view is that TRIA is most likely to fail in achieving its third goal of maintaining post-terrorism event market stability. The original Program was designed to create incentives for insurers to continuing deploying capital, even after a terrorist attack. Now, the Program primarily operates as a solvency mechanism, but no longer provides adequate incentives for insurers to stay in the marketplace following a major attack.

Mr. Gordon said that the last finding underscores that the Program was always intended to have TRIA be a government responsibility until the private sector could normalize; after that, responsibility would revert entirely to the private sector. However, in APCIA's last member survey, 77 percent of insurers said they are still not able to better predict the likelihood of a terrorist attack, 84 percent said they are not interested in providing additional catastrophic terrorism insurance cover, and nearly three-fourths said they would entirely exclude terrorism coverage if TRIA did not exist (and many of the remainder said they would supplement or exclude high-risk regions).

Mr. Gordon said this indicates the marketplace is not prepared to re-take responsibility for the government, and many members do not desire to provide terrorism coverage, but do so because TRIA requires it. He stated that the thresholds created in TRIA were specifically designed by Congress based on industry practices to make terrorism a government responsibility that the private sector would manage on behalf of the government. He added that the intent was that the Program would provide appropriate incentives in exchange for the imposition of mandatory coverage.

Mr. Gordon said TRIA's initial Program Trigger was identical to the certification threshold of $5 million. This was intended to avoid triggering the program for smaller attacks (e.g. car bombs), which would be inefficient for the government to determine payouts and collect assessments or surcharges.

Mr. Gordon said the Program design never anticipated that insurers would be mandated to offer terrorism coverage while being at risk of becoming completely insolvent before a large magnitude event even triggered the Program. He indicated this was not the intent of the Program and the Program has surpassed the rational threshold in balancing efficiency of triggering the Program and market stability.

Mr. Gordon said that the separation of the certification trigger and the Program trigger has created marketplace conflicts, so when the government declines to certify an event, policyholders who decline to purchase terrorism coverage get claims paid and policyholders who bought coverage did not. He said this was not intended but was a consequence of separating the trigger and certification threshold.

Mr. Gordon said that TRIA's deductible was designed to increase from 1 percent in the first year of the Program (when insurers were still recovering from 9/11 and hadn't collected much terrorism premium) up to 10 percent of direct earned premiums. He added that the 10 percent deductible was intentionally chosen based on established industry practice for capital management to avoid exposing more than 10 percent of your surplus to any particular risk. Mr. Gordon said this 10 percent deductible was intended to incentivize insurers to underwrite terrorism and require policyholder risk management and mitigation while the Program would backstop losses beyond what insurers would normally cover under prudent capital management standards.

Mr. Gordon said TRIA was originally designed with a 10 percent co-chare, which was intended to be high enough to ensure diligent claims adjudication by insurers but low as possible to otherwise limit uncertainty resulting from exposure resulting from the mandatory offer requirement. Mr. Gordon provided several examples: regulators reviewing fronting arrangements often require a fronting insurer to retain at least 10 percent of the risk; and a 5-10 percent co-chare was (and is) the standard in catastrophic reinsurance programs.

Mr. Gordon stated that the TRIA recoupment mechanism was specifically designed to collect as much money as possible without overtaxing a post-event stressed marketplace. The original surcharge cap was 3 percent annually, which reflected the most common practice of guarantee funds and other catastrophe insurance backstops to avoid further injuring an already-wounded marketplace.

Mr. Gordon next identified technical operational flaws in TRIA that concern insurers. He said the biggest concern is that TRIA is only fully achieving its first goal, while post-even market stability is questionable given TRIA's coverage mandate and the mismatch between TRIA's thresholds and required industry capital standards.

Mr. Gordon concluded by stating that "as the TRIA threshold dials are arbitrarily spun upward, while the marketplace may currently be stable on the terrorism high wire, the safety net has been lowered now too close to the ground, and a fall might not kill the performers, but they would not be able to climb back up afterwards."

Mr. Gordon then introduced Jon Bergner, Assistant Vice President for Public Policy and Federal Affairs with the National Association of Mutual Insurance Companies (NAMIC). NAMIC represents 1,400 companies that collectively write approximately 58 percent of the homeowners' market, 46 percent of the auto market, and approximately one-third of the commercial market. Members range from small mutual insurers up to the largest national writers.

Mr. Bergner said that NAMIC members who write in TRIA-covered commercial lines have overall said that arbitrarily changing the Program thresholds would unnecessarily destabilize the market, which at present seems to be relatively balanced. He added that the Program's current threshold levels are the highest they can get before individual carriers will careful reassess their ability to write certain coverages (or in certain areas at all). Mr. Bergner said that further arbitrary increases would jeopardize the Program's success with the Program's availability goal because it is in many ways depended on the goal of ensuring insurer stability.

Mr. Bergner said that TRIP's mechanics are designed with individual companies in mind, so TRIP's failure to ensure insurer stability will probably lead to a failure in achieving the stable marketplace that has existed since the Program was instituted. In this sense, discussions about aggregated industry capacity are not relevant, because collective industry capacity does not matter if pressure on individual companies is too great and they are unable to write certain coverages (particularly in high-risk areas).

Mr. Bergner said that rising levels under the Program have generally made companies institute increasingly strict underwriting, risk management, and exposure management guidelines (even under existing Program levels). Although discipline in these areas is desirable, at a certain point it impacts the market. Mr. Bergner provided an example of some NAMIC member companies who non-renewed lucrative workers' compensation contracts in several major urban areas due to the exposure created by the current Program thresholds. He added this problem is equally valid (if not more so) for smaller companies. Member companies have also explained that they have left and/or not entered certain markets and must use strict underwriting guidelines to entirely avoid certain types of risk. He provided the example of one insurer that will no longer take on exposure from shopping malls.

Mr. Bergner said that companies that write across business lines (e.g. workers' compensation and property) can exhaust their aggregation limits very quickly, which ultimately restricts their potential offerings. He added that the reduction in overall capacity being deployed in these markets puts pressure on availability and therefore affordability.

Mr. Bergner provided an example of how the Program Trigger puts pressure on the ability of particularly small insurers to participate in TRIP. The Program Trigger for 2020 is $200 million. If a single event (with $200 million in losses) impacts a single company that writes $200 million in TRIA-covered lines, the Program is triggered. The insurer's individual deductible would be $40 million (20 percent) and it would also pay its co-share (20 percent) above this deductible, putting the insurer's total share at $72 million. The government's initial outlays would be $128 million. Mandatory recoupment would be applied at a rate of 140 percent, resulting in repayment of $179.2 million to the government (a net gain to the government of $51.2 million). Mr. Bergner highlighted that the government begins participating at $72 million, below the $200 million trigger, and also recoups initial outlays at a rate of 140 percent.

Mr. Bergner noted that in comparison, if the event was $199 million then TRIA would not be activated and the insurer would pay a single event loss the size of its entire book of business. Some NAMIC companies facing this type of issue will purchase standalone reinsurance coverage to protect against these potential outcomes. Mr. Bergner said that NAMIC members have generally experienced availability of reinsurance, but this availability is relatively constrained and the market seems very sensitive (particularly in high-risk areas).

Mr. Bergner said that each time the TRIA renewal date approaches, companies have reported affordability and availability issues and the reinsurance market seems to tighten a little bit. He added that reinsurance costs are not automatically allowed to be passed along to the privacy policy, and any rate increases must be first approved by regulators.

Mr. Bergner concluded by stating there are difficulties with the existing Program, particularly as related to the Program Trigger, but NAMIC's members feel that these challenges are generally manageable. NAMIC's view is that any effective terrorism loss management plan needs broad participation by insurers of all sizes and structures in order to be effective.

Following Mr. Bergner, Stef Zielezienski, Executive Vice President and Chief Legal Officer for APCIA discussed the impact of a catastrophic attack. Mr. Zielezienski said that the current marketplace is stable because there has not been a catastrophic event since TRIA was established, and Treasury's report has not thoroughly considered to what extent investors and reinsurers would pull back after a major event, particularly until the marketplace had a better sense of event frequency and the capability and flexibility of industry models. TRIA was created in large part because of significant insurance and reinsurance market retraction following 9/11, and Mr. Zielezienski expressed industry concerns about reinsurance capacity shrinking considerably again in the aftermath of another attack, given that the mandatory availability requirement would place 9/11-level annual exposure on the private sector.

Mr. Zielezienski said that the constriction of voluntary capacity after an event would suddenly halt economic growth and economy, and the mandatory availability requirement would force some insurers to consider overall terrorism exposure and its impact on financial solvency in order to manage new terrorism exposure resulting from a pullback in reinsurance capacity. Mr. Zielezienski said that, in other words, a catastrophic terrorism event under program levers could impact availability for both terrorism risk and other property/casualty risks.

Mr. Zielezienski said APCIA recognizes the political pressure to increase TRIA thresholds in the interest of protecting taxpayers, but said the Program is already one of the most fiscally-responsible government programs ever enacted and it is important to remember that the Program's greatest value is meant to be realized both before and after the United States faces a major catastrophic attack.

Mr. Zielezienski said that even when Congress does not raise thresholds, the thresholds effectively increase automatically as general market growth occurs. Insurer deductibles are calculated as a percentage of the prior year's direct earned premium (DEP), so both DEPs (and TRIA deductibles) will grow as insurers experience business growth and inflation. Mr. Zielezienski also said that as the value of insured property and potential liability rises, so do the costs of insurers responsible for paying a co-share under the Program. Mr. Zielezienski said that although lawmakers may view this increasing industry exposure and reduced taxpayer exposure as a positive development, there will be a different view if TRIA fails to provide an orderly economic recovery after the next catastrophic terrorist event.

The ACRSM's primary mission is to consider whether there are alternative risk transfer mechanisms that can help to protect against terrorism risk. Mr. Zielezienski said that some mechanisms exist, but have limits. As an example, Mr. Zielezienski described how the United Kingdom's Pool Re sold the first terrorism catastrophe bond earlier in 2017 valued at £75 million ($99 million USD). Although Mr. Zielezienski identified this as a positive development, he noted that the value of the bond is not large when compared to the tens of billions of dollars of loss that could occur in a major event. He said that Pool Re officials told APCIA that it was challenge to put together a bond for the issued amount, and they did not anticipate substantial additional cat bond capacity materializing soon. Mr. Zielezienski said this reinforces APCIA's view that TRIA will continue to be critical to the stability of U.S. insurance markets for the foreseeable future, but urged the ACRSM, Treasury, and other policymakers to carefully consider whether the current Program works to provide economic stability in the aftermath of another catastrophe.

Mr. Zielezienski said that the ACRSM can help the Administration and Congress to understand the importance of TRIA to the current marketplace and the dangers to post-event stability due to dialing-back the Program thresholds beyond industry capital management practices.

No Committee members asked questions of the presenters.

**Reinsurance Update**

Frank Nutter of the Reinsurance Association of America provided an update on reinsurance market conditions. Mr. Nutter said the reinsurance market has been pretty stable since the last program reauthorization, and market participants have commented that the Program is a stabilizing factor that facilitates the reinsurance market.

Mr. Nutter said that the vast majority of Program coverage in the private market are property catastrophe trees, aggregate covers, and individual risk covers. He said the standalone market has somewhat retrenched (not eliminated) and coverage for domestic terrorism has somewhat increased in the market.

Mr. Nutter said capacity is a function of exposures in major cities, and that focus on underwriting, aggregates, and sub-limits are common within the reinsurance industry. He said that reinsurance coverage for regional/smaller insurers has not been problematic unless the insurer has a particular focus in a major area.

Mr. Nutter said nuclear, biological, chemical, and radiological (NBCR) coverage is somewhat limited, and there is a particular concern about aggregates in the case of workers' compensation, so capacity is somewhat more limited.

Mr. Nutter said market participants provided the feedback that the reinsurance market related to cyber coverage is still evolving and issues related to physical versus non-physical loss are commonly discussed. Also discussed are concerns about defining cyber terrorism versus cyber warfare. Mr. Nutter said that further clarification from FIO on these topics would be helpful.

Mr. Nutter indicated that some have said uncertainty about the Program's reauthorization at the end of 2020 is driving some demand for private reinsurance, and if uncertainty continues it will continue to drive demand (notably for smaller companies with concerns about exposing their capital and surplus as a result of an event). Mr. Nutter added that if the Program lapses, market participants will focus on "preferred locations" and have even greater sensitivity about aggregate losses.

No Committee members asked questions of the presenter.

**Capital Markets Update**

Mr. Seo provided an overview of the Baltic PCC Ltd. catastrophe bond issued by Pool Re, which provided standalone terror coverage. Earlier in 2019, a three-year terrorism risk cover was placed for Pool Re at a value of £75 million. The bond covered a loss layer of £200 million in excess of £500 million. The bond carried an approximate three percent expected loss with a 5.9 percent coupon spread. It was an indemnity annual aggregate coverage and covered all of Pool Re's exposures except for their merging non-damage business interruption exposure, which is fairly small at this time. Mr. Seo said that although nothing is excluded, explicit cover was provided in offering materials for investors. This included IEDs, aircraft, property damage, NBCR damage, cyber, and physical damage.

Mr. Seo identified noteworthy features of the bond. He said it is the first standalone terrorism catastrophe bond to hit the market, and the first cat bond to be issued in pound sterling. It was also the first CAT bond issued onshore in the United Kingdom under the UK's 2017 risk transformation regulations (which were meant to enable onshore insurance-linked securities transactions). He also believes it provided the coverage for cyber physical damage in the ILS market.

The deal used no third-party risk modeling; Pool Re revealed its own modeling to investors (calibrated by Cranfield University). Mr. Seo said that this disclosure was sufficiently detailed that investors could remodel the deal and perform stress tests and "what-if" analyses, and this enabled the detail to be completed. Mr. Seo identified this as another noteworthy feature.

Mr. Seo said that the implications for the ILS market from this deal are positive; due to pricing, terms, and good support in the secondary market. He acknowledged that £75 million is not a significant amount, but small amounts can nonetheless help build new markets and is therefore promising. He added that the bond was placed during a fairly difficult time for both the traditional and ILS markets, as it followed two years of bad losses (2017 and 2018). Despite somewhat limited capacity, the deal could still be placed and is about as widely-syndicated as many mature ILS placements.

Chairman Sapnar asked Mr. Seo to comment on the historical perception that there is a hurdle to place terrorism risk through ILS due to correlation with capital markets. Mr. Seo concurred that this is a very common perception and serves as a hurdle for some investors, but this serves as a proxy for investors who aren't seeking anything "exotic." In contrast, large institutional allocators will include this type of risk into a portfolio allocation machine and the machine will indicate that it is an attractive bond. Mr. Seo said that it is attractive because standard portfolios would not be compensated if their portfolio is impacted by an event, so when a dollar of exposure is moved from stocks and bonds to a terrorism bond that is compensated, the allocation machine approves of the investment. In comparison, Mr. Seo said that high net worth individuals may have a more "emotional" response about how they want to invest, but institutional investors are the backbone of the capital market, and their main concern is being compensated. He added that the general perception (which is not very informed) is that terrorism risk cannot be modeled, but this deal explained in a straightforward manner how the risk is modeled by Pool Re.

Chairman Sapnar asked whether most typical cat bonds cover only natural perils (and therefore would not include terrorism) or all perils. Mr. Seo responded that he looked at this several years ago, and at that time approximately 10 percent of the capital markets mentioned terrorism, however this included extreme mortality bonds which do not exclude death by terrorism (which are a material part of the market).

Mr. Driscoll commented that the issuance of the Pool Re bond is a good start to the development of the ILS market for terrorism risk. He said that one of the constraints in both the insurance and reinsurance market is with respect to density concentration issues (presumably in large urban or metropolitan areas), but this dynamic in the ILS market for natural perils is generally less of an issue than in vertical stack, capitalized, rated (re)insurance companies. He added that it seems the ILS market has more of an ability to own more volatility as a portion of its portfolio, and asked Mr. Seo if this dynamic would also apply to terrorism. Mr. Seo agreed that ILS markets are able to accept more concentration risk, because a large institutional allocator is putting only one or two percent of its capital at risk, and it is common for an institutional allocator to be willing to lose half (or more) of its allocation to the ILS market in a single event. This would also apply to terrorism as a risk.

Mr. Driscoll said that currently, in the natural peril market, ILS is approximately 20 percent of total capitalization in the market, which is significantly higher than the low single-digit percentages 10 years ago. He said this has had a relatively profound impact on the stability of pricing. Mr. Driscoll then said that one of the goals of TRIA is to have stable pricing, and asked whether ILS capacity supporting terrorism (either standalone or embedded within follow coverages) could experience similar pricing dynamics in the future. Mr. Seo responded that this remains to be seen but he would expect it, because the capital base is very large (over $100 trillion on the fixed-income side alone). He added that ILS capacity is often quoted as being roughly 20 percent of the market, but with respect to severely catastrophic events, he believes the ILS market is actually double traditional market capacity. Mr. Seo said that Florida has the largest exposure in the ILS market, with $1 of every $2 of capital exposed to Florida (therefore approximately $50 billion in Florida exposure if there is a $100 billion ILS market). His firm has reviewed annual reports of public reporting insurance companies and has assessed the traditional reinsurance market in Florida offers approximately $40 billion in limits. This shows that the ILS market has roughly doubled the capacity for insurance within Florida, and these levels create price stabilization.

Mr. Metropoulos asked Mr. Seo to comment on the interest and further challenges that might exist to include workers' compensation in capital markets ILS. Mr. Seo responded that workers' compensation risk in the ILS exists, primarily via earthquake coverage (in California). The ILS market references the amount of workers' compensation exposure and describe losses that would be driven by an event, therefore changing language from earthquake to act of terrorism would not be a significant change because an investor is generally not considering the shift from property coverage to workers' compensation. Mr. Seo noted that he spoke with the Government Accountability Office (GAO) around 2002 and was asked about parallels between 9/11 and earthquake risk, because one insurer had commented to GAO that 9/11 was a little like a highly-focused earthquake event in terms of damage but an earthquake removes the emotional component.

Mr. Metropoulos responded that the earthquake bonds have limits of approximately $200 million to $250 million, whereas private reinsurance markets (and markets backstopped by TRIA) are valued at hundreds of billions. He asked Mr. Seo whether there is another market that might be measured at the same magnitude as terrorism. Mr. Seo responded that the size of the ILS market for risks such as extreme mortality, workers' compensation, and catastrophe are driven by market demand rather than reflecting the willingness of the ILS market to take on the risk. When there is little demand for these types of coverage in the ILS market, it is an indirect signal that the risk is adequately handled by the traditional reinsurance market. The types of coverages in the ILS market are in an experimental change where certain sponsors are interested in developing the market, rather than because of an urgent need due to the inadequacy of traditional reinsurance.

**Discussion of Future Committee Activities**

Chairman Sapnar opened discussion about the Committee's future agenda and timelines for delivering a report to FIO. He suggested that all Committee members should obtain copies of FIO's most recent reports. FIO's next Program Effectiveness report is due at the end of June 2020, and Chairman Sapnar recommended that the Committee finalize its recommendations no later than April 30, 2020. Director Seitz added that the Committee should consider the issues it wants to address, and stated that the issues outlined by Assistant Secretary Patel may have more relevance to the Committee's work than others. Director Seitz said that FIO would defer to the Committee's determination of which issues are more important, but said that receiving a written work product in April would be helpful as it would provide the team time to incorporate the Committee's findings into the Program Effectiveness Report. Mr. Seo suggested that a more aggressive timeframe be adopted to provide more individuals with the opportunity to comment. Director Seitz suggested the Committee hold a few more meetings before delivering a final product to FIO. Chairman Sapnar suggested the Committee should aim to complete its initial draft at the end of the first quarter and distribute the document for comment before distributing a final document to FIO on April 30.

Chairman Sapnar opened discussion to the Committee about specific areas of focus to be examined, and requested input from FIO. Director Seitz responded that the information about Pool Re presented by Mr. Seo was useful background for FIO and said that the rest of the Committee's focus should be on how to increase private market participation. Mr. Ifft added that it would be helpful to have the Committee's opinion on how changes in the Program mechanics (deductible, program Trigger, co-pay) would impact both the direct insurance and reinsurance markets.

Chairman Sapnar asked FIO for a summary of what activities the Committee needed to perform in public meetings and what could be done outside of meetings. Mr. Wolfe asked if there are other areas (beyond those discussed by Assistant Secretary Patel) that the Committee wanted to focus on in addition to narrowing the list of six items. Mr. Driscoll suggested the Committee focus on the nexus of cyber coverage under TRIA, potential ambiguities between war and terror, and clarification around the certification process.

Chairman Sapnar asked if FIO was expecting market data or commentary with respect to changing Program dynamics. Director Seitz responded that both qualitative and quantitative information would be useful. He added that FIO analyzes various aspects of the market through its yearly data call (as published in the Program Effectiveness and Small Insurer reports) and it would be helpful for the Committee to provide information on other markets as well. Mr. Ifft added that although FIO analyzes how the market currently operates, it would be helpful to have the Committee's projections on how the Program would work under different conditions.

Chairman Sapnar suggested the Committee meet no more than three times before March 31 and suggested holding meetings in October, December, and February. He said the Committee would make a decision about future meeting dates after the meeting, and information would be posted on the ACRSM website.

Mr. Seo asked whether Committee members are able to communicate with each other between meetings. Lindsey Baldwin, the Designated Federal Officer (DFO) outlined the requirements of the Federal Advisory Committee Act. She confirmed that the Committee can perform preparatory work, including correspondence needed to prepare work products. Before making a final decision on advice or recommendations, the Committee would be required to fully discuss and vet the proposed recommendation in a public forum. Ms. Baldwin also requested that when Committee members correspond between meetings, they should copy Director Seitz, Mr. Ifft, and Ms. Baldwin.

Mr. Driscoll requested clarification on the Committee's areas of focus. Chairman Sapnar said that in addition to discussion of the Program mechanics, the Committee would discuss how maintaining the status quo beyond 2020 would affect the marketplace. He also suggested looking at the issues of cyber, NBCR, and alternative risk-sharing or funding sources such as the purchase of reinsurance by the federal government. Ms. Peters added that the Committee had discussed the certification as well. Mr. Driscoll suggested discussing the immediate market implications if the Program is not extended beyond December 31, 2020, and Director Seitz responded that if the Committee believes it is an important factor as the reauthorization process continues it would be potentially helpful for FIO to have this information. He added that it may also be helpful to have information based on dynamic modeling that varies the Program's mechanics.

Mr. Ifft concurred that although FIO has made general conclusions that terrorism risk insurance would cost more and be less available in the absence of the Program, it does not have a data set to provide more detail on the implications of non-renewal. Mr. Wolfe questioned whether the Committee would be able to provide value in this area, noting that the last reauthorization demonstrated what would happen in the absence of the program (for several weeks) and he would expect a similar outcome this time. Mr. Ifft replied that the market dynamics could change if there was an expectation that the Program was permanently going away (as opposed to being temporarily suspended).

Mr. Metropoulos asked whether data collected in FIO's TRIP data call would be available to the Committee. Mr. Ifft replied that FIO would need to confirm this but he believed FIO would be able to direct the Committee to the proper information or provide some access to the data.

Chairman Sapnar concluded the meeting by suggesting the Committee finalize a date for the next meeting and assign Committee members to work on specific agenda items before the next meeting. He added that the Committee would decide the agenda over the next month as members worked to prepare for the next meeting (in terms of whether the Committee would bring in outside speakers or begin debating the issues).

At 3:21 pm, Chairman Sapnar concluded the meeting.

I hereby certify these minutes of the August 12, 2019 Advisory Committee on Risk-Sharing Mechanisms public meeting are true and correct to the best of my knowledge.

Mike Sapnar
Chairman