DEPARTMENT OF THE TREASURY FEDERAL ADVISORY COMMITTEE ON INSURANCE (FACI)

SUMMARY – 17 August, 2017

The Federal Advisory Committee on Insurance (FACI) convened at 1:00pm on 17 August, 2017 in the Cash Room at the US Department of the Treasury, 1500 Pennsylvania Ave., NW, Washington, DC, with Daniel Glaser, Chair, presiding.

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

Committee Members Present:

DANIEL GLASER, President and Chief Executive Officer, Marsh & McLennan Companies, Inc., Chair

DAVID (BIRNY) BIRNBAUM, Executive Director, Center for Economic Justice KURT BOCK, Chief Executive Officer, COUNTRY Financial

AL REDMER, Commissioner, Maryland Insurance Administration (By proxy, Robert Baron) QUINCY BRANCH, President and Chief Executive Officer, Branch Benefits Consultants ELIZABETH BROWN, Associate Professor, College of Business, University of Wisconsin - La Crosse

MARIA T. VULLO, Superintendent, New York Department of Financial Services (By proxy, Scott Fischer)

JOHN FRANCHINI, Superintendent, New Mexico Office of the Superintendent of Insurance THEODORE MATHAS, Chairman, President and Chief Executive Officer, New York Life Insurance Company (By proxy, Julie Herwig)

MARK GRIER, Vice Chairman, Prudential Financial, Inc. (By proxy, Naveen Agarwal) GEORGE KEISER, Representative, North Dakota House of Representatives

JAMES (JIM) KELLEHER, Executive Vice President & Chief Legal Officer, Liberty Mutual Insurance

THEODORE (TED) NICKEL, Commissioner, Wisconsin Office of the Commissioner of Insurance

MARGUERITE (JUANITA) SALAZAR, Commissioner, State of Colorado Division of Insurance

CHRISTOPHER SWIFT, Chairman and Chief Executive Officer, The Hartford (By proxy, David Robinson)

ALSO PRESENT:

STEVEN SEITZ, Deputy Director, Federal Insurance Office DANIEL MCCARTY, Federal Insurance Office, US Department of the Treasury

Welcome and Introduction

FIO Deputy Director Steven Seitz welcomed committee members who were able to attend the second FACI meeting of 2017. He gave a brief history of the role of the FACI and its mandate

to present advice and recommendations to the Federal Insurance Office. He then turned the meeting to Chairman Glaser.

Chairman Glaser welcomed the FACI members. Chairman Glaser emphasized that FACI helps FIO fulfill its important role. He then thanked all members for their contribution. Chairman Glaser expressed that he is looking forward to the presentations and welcomed Sean McGovern to the FACI as a representative for XL Catlin.

Discussion of the Insurance Marketplace

Mr. Glaser introduced the "Insurance Marketplace" portion of the discussion by noting that the insurance industry employs more than two and a half million people in the United States and that there are over 6,000 insurance companies, agencies, brokers, et cetera, related to the insurance business. In total, the industry holds more than \$5 trillion in cash and invested assets and the industry, in 2014, contributed \$450 billion to the U.S. GDP. Mr. Glaser then introduced the first presenters: Mr. Sean Kevelighan, CEO of the Insurance Information Institute, and Mr. Bob Kerzner, CEO of LIMRA.

Mr. Kevelighan opened by discussing about how he developed a passion for insurance, and what this industry is and what it does to promote economic growth and why it's a sustainable business model. Mr. Kevelighan then discussed 9/11, where the industry paid more than \$25 billion in claims. And any type of insurance claim that you can think of was paid as a result of 9/11, from auto insurance to workers' comp to pet insurance. This caused the market to effectively shut down and forced Congress to act to pass TRIA.

Mr. Kevelighan pointed first and foremost to, if you look at the heart of the financial crisis in 2010, there were 157 bank failures. There had eight insurance impairments at that same time. And impairments mean, for the most part, that the claims are being paid and the businesses are going into runoff. Mr. Kevelighan continued to point out the sustainability of insurers by comparing leverage ratios of the insurance industry to those of other financial services sectors.

Mr. Kevelighan pointed out that currently there are about 2.8 million jobs in the industry and we have a lot more jobs that we'll be ready to be giving, too, so long as we can recruit people into the industry, but noted the importance of educating people about the good jobs in the insurance industry, specifically by pointing out the importance of the industry to GDP and to the incredible work that insurers do in charity and community building. Mr. Kevelighan also noted that, in 2017, there were \$1.5 trillion in claims paid.

Mr. Kevelighan then turned the presentation over to his colleague Mr. Wesibart. Mr. Wesibart noted some of the long-term issues facing the insurance industry, such as autonomous vehicles, the drug epidemic, and tax reform. He then noted the close relationship between direct written premium and nominal GDP. Mr. Wesibart then discussed the massive amount of money insurers put in bonds and other types of major asset categories, and the effect of interest rates on insurer portfolios. Mr. Wesibart then turned the presentation over to his colleague Mr. Jim Lynch.

Mr. Lynch discussed catastrophes and their effect on the P/C industry. In 2016, nat. cats totaled more than \$175 billion, a significant increase from 2015. At this point in 2017, thus far, we are at about \$40 billion globally. Two points here: first, the numbers are continually increasing, and, two, that there are significant gaps for other insurance coverages, the largest of which is flood insurance. The U.S. does a much better job than the rest of the world, but still not great. Another issue III looks at is earthquakes, which have also been growing in frequency.

Mr. Lynch also spent some time talking about cyber-related attacks, which have also been clearly growing in frequency. It's the fastest growing product in property and casualty insurance right now, it's grown by about 35 percent year-over-year. By 2020, we expect cyber will be \$7.5 billion of written premiums. Nevertheless, Mr. Lynch noted that most of the risks are being taken up by larger firms, but that III is also very concerned about smaller firms and what their exposure is to cyber-attacks. Mr. Lynch also discussed road safety, and the fact that auto losses are increasing in the insurance world because of a confluence of five factors: the economy; distracted driving; driving faster; legalization of marijuana; and the expense of safety devices and other improvements.

Mr. Glazer then turned the conversation over to Mr. Bob Kerzner. Mr. Kerzner opened by pointing out that, in spite of growing population, that fewer people are buying life insurance. Mr. Kerzner then discussed a slide noting that middle-income Americans typically purchase permanent life insurance and that term insurance does not make sense to this demographic. Regarding annuities, sales are slumping, but that indexed annuities are growing fast primarily because they have upside potential. This slide also highlighted the slumping sales of variable annuities and LIMRA's prediction of a continuation of this trend.

Mr. Kerzner then noted that LIMRA has seen a decrease in the purchase of life insurance to 70% of the U.S. population having a policy, but that, interestingly, Millennials, generally believed that they should purchase life insurance, and that life insurance was an important investment. In addition, the study found that, interestingly, 42% if Millennials wanted to purchase life insurance from an agent. Mr. Kerzner also reiterated Mr. Kevelighan's point that it is difficult to recruit Millennials to the industry. Mr. Kerzner then highlighted the importance of using a mix of human interaction and online engagement to encourage Americans to purchase life insurance.

Mr. Kerzner then noted that where most CEO's are turning attention is on the rise of the consumer and how their companies can improve the customer experience and how companies should build a deeper relationship with their clients. Mr. Kerzner then discussed a number of "InsurTech" companies in the life insurance sector and what they are doing to sell products quickly and efficiently.

Discussion of Advanced Analytics and Big Data in the Insurance Industry

Chairman Glaser introduced the second topic and Dr. Kirsten Martin, Associate Professor of Strategic Management and Public Policy at George Washington University School of Business.

Dr. Martin opened by talking about some of the ethical issues that we see in the big data industry, generally, and then noted that she would try to bring it back to why some of the issues might be more important or highlighted within the insurance industry.

Dr. Martin focused on three areas: One is the source of big data, which sometimes are the big consumer big data sets that you might get access to; the second is the analysis of big data; and the third is focusing on the marketing and use of big data. Dr. Martin compared this to a normal manufacturing process where you get raw materials and look at how we treat individuals, where the source, how the organization treats everyone. One might ask questions about how a product is actually manufactured. Finally, one may ask how the product is being used. In our scenario, we're talking specifically about big data, specifically some of the data brokers and access to that type of socioeconomic data from individuals.

Dr. Martin noted that companies can actually purchase aggregated data and that can be used, in turn, on actual customers. Dr. Martin stated that the problem with this is that consumers are not aware that their data is being collected and that, when this is pointed out, they become very upset.

Another argument in favor of using aggregated information is that consumer facing companies do not obtain the data, but just buy it from others. This argument, however, fails to mention that it is the consumer-facing organization that takes the public relations hit, not the company behind the scenes. A third argument is that everyone else is doing it.

Dr. Martin noted that the insurance industry hinges on trust and that, compared to data aggregators, insurers are very trusted by the American public. One reason for this is that there is no market or regulatory pressure for data aggregators to do anything different. From a regulatory standpoint, data aggregators are in a 'no-man's land.'

A second issue facing insurers is the use of algorithms. A concern here is that a clean algorithm, using permissible data, may be a proxy for other data that is not permissible. Here, it is important to ask ourselves what data is appropriate and what is not and to consider whether insurers are gathering source data without realizing it because it is hidden as proxies to something else.

Dr. Martin concluded by highlighting that there is a difference in trust between the supplier of the data and the insurance company, but probably more importantly long-term, there is a difference in the importance of trust in data aggregators and insurers.

Discussion of Artificial Intelligence in the Insurance Industry

Chairman Glaser introduced the third topic and Mr. Jim Bramblet, Managing Director for Property and Casualty and the Digital Lead for North America at Accenture, and Sharad Sachdev, Managing Director of Artificial Intelligence and Analytics at Accenture.

Mr. Sachdev thanked Mr. Glazer and opened by noting that anything and everything we do today is informed, influenced, and applied artificial intelligence, which presents predicaments for insurance companies. Mr. Sachdev provided examples of DNA sequencing and drones to

illuminate the information disparity between insureds and their insurers. Mr. Sachdev also noted that insurers need to recognize that there are a number of opportunities where artificial intelligence can play a role in the 'back office' work that is done today. Mr. Sachdev then passed the microphone to his colleague Mr. Bramblet to discuss the insurance specifics. Mr. Bramblet noted that there are fairly benign ways for AI to support insurers and their agents/brokers. For example ABIe as an example to support agents and brokers and how they sell commercial policies. Piggybacking off of Dr. Martin's presentation, Mr. Bramblet noted that there is a different dynamic when it comes to AI and consumers, especially because AI can learn so much. Mr. Bramblet noted that this is an area that probably requires more focus and consideration of how we should regulate it.

Mr. Bramblet then noted that AI is everywhere across the insurance industry. One interesting point on the P/C side is that we are seeing that 'Insur-Tech' companies do not really want to disrupt the industry. Mr. Bramblet then turned it over to Mr. Sachdev.

Mr. Sachdev posed a number of hypothetical questions to the audience and then noted that, for AI and bots, a lot of times bots can arrive at the correct outcome, but humans do not know how they arrived at that outcome and what variables went into making such an assessment.

Discussion of the Cyber Insurance Market

Chairman Glaser introduced the fourth topic and Mr. Ryan Gibney, Vice President and Northeast Cyber Technology Leader, Lockton.

Mr. Gibney discussed what the cyber insurance industry views as cyber. First, the industry views it as privacy, but also as security. Both types of issues are covered under cyber insurance policies. Mr. Gibney then gave an overview of how companies are attempting to address the risks. Companies are trying to address the process through enterprise risk management. First, identify data that is connected to a type of information technology network; second, quantify and understand these assets; third, have an incident response plan in place; fourth, determine when to get insurance.

Mr. Gibney explained that we continue to see that the risk of an attack on physical assets, whether it be pipelines or electrical grids or manufacturers, increasing and the insurance industry is working to address that, both in traditional property and casualty policies and in cyber specialist policies. Mr. Gibney also noted that insureds cannot view risk only through quantitative factors, but also must view them through qualitative factors.

Mr. Gibney yielded his time to Chairman Glaser, who passed the conversation off to Tracie Grella, Global Head of Cyber Risk Insurance at AIG and to John Coletti, Chief Underwriting Officer for Cyber and Technology XL Catlin. Ms. Grella explained that, as regulation in the U.S. develops, companies are becoming more interested in buying cyber insurance and transferring risk. Ms. Grella also noted that the buyers for cyber insurance are changing: policies have been expanded to provide coverage for physical attacks, so cyber-attacks that result in physical damage, bodily injury, and property damage. Because of this, we are really in a transition state

where carriers may be lowering maximum limits on coverage and a little bit more diligence in the market.

Ms. Grella also pointed out that technology firms are trying to enter into the market to support the insurance marketplace. Not necessarily to provide insurance, but to support it by giving, for example, threat information, underwriting platforms, etc. One question insurers should ask is 'what data is needed to properly underwrite cyber risk.' The next is how to collect this data. In cyber risk, companies are very concerned about the systemic nature of the risk: the supply chain and common nodes of aggregation is something that is very important for us to know how to manage the portfolio.

Ms. Grella also pointed out that most non-cyber policies are silent as to whether cyber is covered and stated that the industry needed to determine if it wanted to keep that silent or whether it should proactively address it or exclude it. Regarding standardization of the product, Ms. Grella believes that we are not yet there: risks keep developing and insureds keep asking for different types of coverage. To address this, brokers are adding their forms, which creates additional forms and more complexities. Ms. Grella then turned the conversation over to Mr. Coletti.

Mr. Coletti focused on some of the specific issues that insurers are having with respect to underwriting cyber products. First, he noted that it is important to understand that this is a new challenge that has been around for 15 years max and that, in addition to this, insurers do not have the claims data to support actuarial rates that have been put into place. This makes underwriting difficult.

Mr. Coletti then focused on where attacks are coming from, including cyber criminals, hacktivists, rogue employees, and nation-state attacks. Regarding nation-state attacks, these attacks are very difficult to track and quantify from a valuation standpoint. When U.S. companies are losing from these attacks, there are a number of different loss estimates. Loss estimates vary considerably from trade secret loss standpoints. Nation state attackers have unlimited resources, unlimited time, very smart people, and they are going against companies with limited resources and time. One of the biggest challenges we have is that we do not have the requisite skill set to underwrite this type of attack. So most underwriters, even in the cyber space, are not trained in computer engineering or have some sophisticated degree in cyber-security. Very few underwriters are experts in cyber-security. This trend is changing, however: a number of companies are beginning to bring in experts to ask the right questions.

Mr. Coletti also focused on the difference between what is covered versus what is uncovered. This is really a concern, because if you ask and survey a bunch of companies, their primary concern is the loss of their own IP and what would happen to their company should that be stolen or get in the wrong hands, which is pretty much an uninsurable risk at this point. This is the case because it is extremely difficult to value. We are not great at valuing intangible losses.

New Business and Closing Remarks.

Before turning over the meeting to Deputy Director Seitz, Chairman Glaser thanked all of the presenters and participants, and provided a brief FIO update.

Chairman Glaser thanked everyone and mentioned that the next FACI meeting would be on Thursday, November 21.

At 4:40pm, Chairman Glaser concluded the meeting.