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INTRODUCTION

For your Summer reading pleasure, this edition contains a great variety of different topics and goes from new and emerging all the way to dead but not buried business. Two aspects of the handling of legacy business are examined as well as potential future reinsurance risks through climate change and the growing interest in the partial privatizing of residential flood risk as the Federal flood program is up for renewal. All front and center issues today!

Our first article is Trans Re's Liz Geary's very interesting article entitled **US Private Market Residential Flood Insurance – Some Thoughts Before You Jump In**. She covers the existing situation with residential flood and what might emerge as opportunities for reinsurers as the National Flood Insurance Program renewal works its way through Congress. At least that topic does have bi-partisan support and what finally emerges will be a talking point for some time. With the first-time placement in 2016 of an NFIP reinsurance program and ample reinsurance capital capacity this is going to be of ongoing interest and, to this end, we will be having a flood session at our 2018 Conference, details of which follow later in this introduction. Ms. Geary is a former IRUA board member and leader of the team that brought the first of our unique Next Generation Reinsurance Leadership Seminar to fruition in 2012. This Seminar is held every two years and we have already started working on the 2018 program!

Our second article is the first of two looking back to past but continuing liabilities and the new options companies have to handle these to finality through restructuring, internal or external management, or divesting. Anna Petropoulos is the Founder of Apetrop USA Inc. and highly experienced in the development and management of runoff liability management. Her excellent article entitled: **The Restructuring Conundrum** details recent developments for the ongoing handling of US portfolios with several states adopting modified versions of the UK's Part VII transfer procedures thus giving carriers the option of an expedited exit route.

Next, we return to the present with an emerged or emerging risk depending on your point of view, with Dan Stinson's article entitled **Emerging Risks – Climate Change Related Impacts on the Insurance and Reinsurance Industry**. Mr. Stinson was one of the recipients of a 2016 IRUA Scholars Award for this paper written while he was interning with member company JLT Re in Philadelphia. He graduated from Villanova University in May 2017 and has joined a business intelligence consulting firm as an associate solutions consultant.

Finally, we return to legacy business with another very interesting and practical look at business solutions especially for company owned and acquired captive insurance companies. **Enterprise Risk Management, Mergers and Acquisitions, and the Future of Loss Portfolio Transfers** is the subject of Temple University professor M. Michael Zuckerman and his associate Amanda Wolfgang. Professor Zuckerman has extensive practical experience dealing with this topic from his two-decade career, including with, Willis Marsh, and most recently Aon where he was Managing Director and Northeast Regional Health Care Practice Leader. After many years of being an adjunct professor he is now full time at Temple University's Fox School of Business. Amanda Wolfgang assisted in the preparation of this paper and is an actuarial science major scheduled to graduate in May 2018.

From the IRUA News Desk……

Of great interest to our readers, we are pleased to announce that with the continuing development of our **website** (www.irua.org) the new, searchable, **database of all JOR articles** going back to the initial Vol.1 No.1 in the Fall of 1993, **is now active and accessible**. You will need your username and password to login under the "Member Login" tab in the upper right- hand corner of the site, and that will then open up the archive of almost 400 articles! As we have said before, this will be a huge benefit of IRUA membership, or for a modest annual subscription, will likely to be well used by claims, underwriting, legal and consulting professionals.

Another new feature of the website is an "Industry Events" tab on the homepage, or dashboard as it is now fashionably called. This is a service we have long wanted to offer and hope that you will find it useful. Please feel free to email me (jwallis@irua.org) with any other industry event not listed that you feel would be of interest to our members and subscribers.

In addition to our 50th Anniversary Members Meeting and Conference reported on in the last edition, we have held two excellent seminars, the first being **Reinsurance Audits** with one day being devoted to Underwriting and a second day looking at Claims. This month we just held a new seminar – also well attended – reviewing **Multiline Reinsurance Underwriting**. This, too, received great feedback plus plenty of ideas for future topics and formats. The Education Committee is already working on an expanded slate of events for 2018 and these will be announced later this year – and, of course, you will be able to find them on the website.

As mentioned earlier, the Conference Committee is hard at work on the 2018 Annual Meeting & Conference being held **April 11-13, 2018 at the Marriott World Center Orlando** and details will be provided as they emerge but the framework of topics is agreed under the tentative **theme of "Game Changers"**.

The board just held a **Strategic Offsite meeting** at Munich Re America' conference center in Princeton, NJ and much was accomplished. In other board news, we are pleased to announce that current Treasurer, **Andrew Downing of JLT Re** has moved up to Vice President and our new board member is **Josh Hackett** of Arch Re as **Tom Hettinger** has moved from Arch Re to Guy Carpenter. New since April, board member **Danny Hojnowski** and the Scholars Committee are hard at work reviewing applications and essays for our **2017 Scholars Essay Program** and, this year, the board has authorized **a total of up to $17,000**. in essay awards. Also, Danny has been busy organizing an **Intern Lunch n'Learn and Networking event** at Trans Re's downtown Manhattan office. Around 40 college student, interns at IRUA member companies, attended and heard first hand from underwriting, broking, risk management and claims experts of what it is like to work in the reinsurance industry. A fantastic showcase for encouraging new professionals to enter our industry!

Best regards,

Jerry Wallis , IRUA Executive Director

Intermediaries & Reinsurance Underwriters Association

Vision

To facilitate a vibrant forum that encourages professional and personal development of member company personnel through educational excellence, the exchange of knowledge among industry constituents within the insurance and reinsurance marketplace and recognition for academic excellence for the next generation of reinsurance professionals. We accomplish this vision through focused educational offerings, a robust Scholars program, the publication of the *Journal of Reinsurance,* and an Annual Conference.

Mission Statement

The IRUA is a not-for-profit corporation, organized for the purpose of providing high-quality insurance and reinsurance education, meaningful networking opportunities, and the dissemination of topical publications and information relevant to the reinsurance industry.

US PRIVATE MARKET RESIDENTIAL FLOOD INSURANCE – SOME THOUGHTS BEFORE YOU JUMP IN

BY ELIZABETH GEARY, TRANSRE

Abstract: The privatization of residential flood insurance creates an opportunity for premium growth in the (re)insurance market. With the NFIP set to expire later this year, potential new legislation will help remove some hurdles to encourage increased private market participation in flood insurance, providing homeowners with additional coverage options. As companies build their flood strategies, they will invest in mapping, modeling, underwriting and pricing to write profitable flood business. A key part of success is distribution and effective communication.

About the Author: Elizabeth's reinsurance career began at Transatlantic Reinsurance in 2003. She has rotated through the Traditional Casualty, Property, D&O / E&O and Medical Malpractice Underwriting Divisions, as well as short secondments to the London, Paris and Zurich offices. From July 2005 until July 2010, she worked as an underwriter in the Property Treaty Division. She then joined the Medical Malpractice Department to underwrite physician, hospital and pharmaceutical liability treaty business. In March 2013, Elizabeth transferred to the Global Risk Management Department where she managed risk governance and underwriting risk. From September 2015 until present, she is a team leader in the US Property Treaty Department, managing various accounts and the flood underwriting strategy.

Insuring flood risk has become a hot topic over the past few years as it is a new source of potential (re)insurance premium at a time where (re)insurance capacity is at an all-time high. Currently the National Flood Insurance Program (NFIP) writes just under 5M policies, representing $3.5B in written premiums.[1] The NFIP has been the largest insurer of US flood since the late 1960s, when insurers were unwilling to take on flood risk – a peril that is the most common and costly natural disaster in the United States.[2] So what has changed since then, and why do insurers now want to get involved?

Flood losses remain unpredictable due to many factors, including increased storm activity, rising sea levels, climate change, dam failures and building development impacting topography. However, the industry now has more advanced mapping and modeling tools to help evaluate flood risk. While the models – particularly those that consider inland flood risk – are still in their infancy, key characteristics such as base flood elevation, foundation, distance to water and other exposure data can help underwriters select risks and underwrite them with more accuracy than a map / flood zone definition-only based approach. In addition, the NFIP has recently (2016) made additional exposure data (county level) available which, along with loss information, can help validate the models and inform rates, an important part of the equation.[3]

At a portfolio level, the models can aggregate flood risk exposure and provide results for storm simulations based on scenarios and/or probabilistic results. The components and methodology of each model varies, and as a result, companies may look to a multi-model approach or an adjusted modeled view while the models continue to develop.

While private insurers have written forced-placed and excess flood business for some time, opportunities to write primary flood have emerged, with the potential to grow even more with clarifications / changes to legislation in advance of the NFIPs expiration later this year. At the time of publication, there are two draft bills in the House (H.R. 2874 "21st Century Flood Reform Act"[4] & H.R. 1422 "Insurance Market Parity and Modernization Act"[5]) that would promote private insurance involvement, including:

- removal of the write-your-own (WYO) non-compete, allowing WYO writers who write on behalf of the government to also write private flood;
- making additional NFIP data publicly available, including more detailed loss information; and
- clarifying that flood insurance policies written by private carriers will satisfy the mandatory purchase requirement for government-backed mortgages in Special Flood Hazard Areas (SFHAs) – areas commonly known as Zone A and Zone V where there is a 1% annual chance of flooding (1:100).[6]

Many legislators are willing to have more private market

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1 "Policy Statistics, Country Wide, as of 3/31/17", NATIONAL FLOOD INSURANCE PROGRAM, https://bsa.nfipstat.fema.gov/reports/1011.htm

2 "National Flood Insurance Program Fact Sheet", NATIONAL FLOOD INSURANCE PROGRAM, https://www.fema.gov/pdf/media/factsheets/2011/mit_natl_flood_ins.pdf (last updated May, 2016).

3 "NFIP 2017 RMS Storm Surge Results Summary," FEMA, https://www.fema.gov/media-library-data/1488837683445- efd94bff87a9d89e1a3298c26046857f/04_NFIP_2017_RMSv16_StormSurge_ResultsSummary.xlsx

4 21st Century Flood Reform Act, H.R. 2874, 115th Cong. (1st Sess. 2017), https://www.congress.gov/bill/115th-congress/house-bill/2874.

5 Flood Insurance Market Parity and Modernization Act, H.R. 1422, 115th Cong. (1st Sess. 2017), https://www.congress.gov/bill/115th-congress/house-bill/1422?q=%7B%22search%22%3A%5B%22hr1422%22%5D%7D&r=1.

6 "Flood Zones," FEMA, https://www.fema.gov/flood-zones (last updated Mar. 7, 2017).

US PRIVATE MARKET RESIDENTIAL FLOOD INSURANCE …

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involvement in flood insurance to give consumers more options with increased coverage at potentially reduced premiums.

While there is some concern that insurers will "cherry-pick" the best risks, insurers will likely have different risk appetites and views on what is the "best risk". For example, some insurers may prefer Zone X policies which produce a low premium, but have a more remote possibility of loss. Others may identify the SFHAs as the best opportunity for them as these policies tend to produce the largest flood premiums and have a better balance of premium to limit. Some companies may take the view that a wider geographical distribution, with policies from multiple areas and different characteristics is right for them.

One group of risks that the NFIP is likely to be left with, however, and will need to continue to address, are repetitive loss properties, which account for 1% of insured properties, but 25-30% of flood claims.[7] Repetitive loss properties aside, the likely scenario is that over time insurers will take a significant amount of risk from the NFIP, reducing the overall risk to the program and, ultimately, to taxpayers.

The insurance market plays an important fundamental role in pricing flood risk. Underpricing risk leads not only to NFIP deficits, but also to overbuilding in high risk areas. Conversely, overpricing leads to under-insurance and inefficient spread of risk. Collaboration between the NFIP and private insurers and reinsurers leveraging rapid technology innovations should lead to more efficient, sustainable pricing and more responsible and equitable property development.

Some primary insurers are already writing private flood – in certain instances – where insurers have satisfied bank requirements or where consumers buy flood without any mandatory purchase requirement. In fact, in Florida – a state often at the forefront of (re)insurance opportunities, and with the largest number of flood policyholders – there are currently 15 primary flood writers actively writing flood insurance on an admitted basis.[8]

Primary insurers who look to invest in flood modeling / underwriting technology, write flood risk and keep a portion net, could write coverage as a stand-alone policy or as an endorsement to their homeowners' policies. Stand-alone carriers or direct writers could price / bind flood through easy online tools for agents and/or consumers, or through mobile applications, which is appealing to many clients who want a fast turn-around time with little interaction. Those who write flood as an endorsement could be at an advantage however, over those writing on a stand-alone basis, as they arguably will have better access through their existing, established customer base of homeowners.

Agents benefit from private flood as an option as they will either grow premium with existing clients, or provide an option to the NFIP product, where the turnaround quoting / binding time may be much faster than that of the current NFIP process. From a homeowner's standpoint, having flood as an endorsement to his/her homeowner's policy is appealing if the price is more affordable and/or the coverage more expansive – in terms of one deductible, expanded dwelling (coverage A), additional basement coverage, or loss of use coverage (coverage D), for examples – not to mention having one claims adjuster and removing the wind vs. water argument.

In addition to the 5M existing NFIP flood policies, there is a largely untapped market – homeowners who own their homes outright and do not have a mandatory purchase requirement and consumers who live outside of a SFHA. These homeowners may not understand the true risk of flood; might think they already have coverage; or might not see the value in an NFIP policy that is limited in coverage and can be expensive relative to their homeowner's policy.

Of note, 20-25% of all claims come from outside SFHAs. Indeed water flow does not stop at the end of a high risk flood zone, and flood loss does not come from surge alone, as evident in Superstorm Sandy where loss occurred in upstate NY and Vermont, for example.[9] Another interesting statistic is that 80% of residents living in areas affected by Sandy had no flood insurance.[10] These instances show that there is an opportunity for insurance companies, agents, politicians and others to stress to these homeowners the importance, availability and affordability of coverage.

An important part of the insurance offering is reinsurance support. Today, there is more reinsurance capital than ever before – at year-end 2016, global reinsurer capital was $595B vs $385B in 2006.[11] As this capital continues to grow, companies look for new opportunities, particularly involving perils that can be modeled and may not correlate with other financial markets or instruments. In fact, some reinsurers/alternative capital markets have invested in flood modeling capabilities themselves and are positioned to write flood risk on a 100% basis, through a primary insurer. Other reinsurers prefer a more traditional reinsurance approach – through a quota share partnership, or on an excess of loss basis.

With flood, balance can be an issue, particularly when flood exposure is coastal and potentially competes with a company's allocated wind aggregate. As the flood models are new, a more traditional form of underwriting, assessment and aggregation will have to take place in order to be competitive in the reinsurance market.

Reinsurance opportunities will emanate not only from private market development, but also from the NFIP itself. The NFIP is currently running at a deficit of over $20B, largely due to Hurricane

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7 "Severe Repetitive Loss Property Locations in FEMA Region IV and VI," FEMA, https://www.fema.gov/media-library/assets/documents/16114 (last updated May 1, 2014).

8 "Flood Insurance Writers in Florida," FLORIDA OFFICE OF INSURANCE REGULATION http://www.floir.com/Sections/PandC/FloodInsurance/FloodInsuranceWritersFL.aspx

9 "Flood Insurance- Frequently Asked Questions," FEMA, https://www.fema.gov/media-library-data/20130726-1803-25045-0940/st_broomein.txt

10 Carolyn Kousky and Erwann Michel-Kerjen, *A Look at 35 Years of Flood Insurance Claims*, ASSOCIATION OF STATE FLOODPLAIN MANAGERS (2016), http://www.floods.org/ace-images/35_Years.pdf

11 "Reinsurance Market Outlook, April 2017," AON BENFIELD, http://thoughtleadership.aonbenfield.com/Documents/20170405-ab-analytics-rmo-april.pdf

Katrina and Superstorm Sandy. In 2012, Biggert-Waters legislation allowed the NFIP to make changes in rates with a view to make the program solvent going forward (existing debt aside). At 9/1/16, FEMA purchased reinsurance for the first time in a test placement, which was expanded to a larger placement of just over $1B, placed with 25 reinsurers at 1/1/17.[12] Draft legislation from members of the House will make the transfer of risk – via reinsurance or capital markets – a mandatory requirement, potentially creating reinsurance opportunities.

In summary, for insurers, there are a number of hurdles to writing private flood:

- modeling /underwriting / pricing the risk;
- a bank's acceptance of a private policy for SFHAs;
- a strong distribution network to allow for spread of risk, diversification and enough volume to cover fixed costs and make the venture worthwhile;
- for admitted carriers, insurance department flexibility as they work to get flood's risk-reflective price right;
- finding the right reinsurance partners and structures to grow profitably; and
- perhaps the biggest hurdle – the consumer themselves; changing consumers' understanding and perception of flood risk and effectively communicating the benefits of private flood insurance.

It will take time for policies to migrate to the private side – insurance companies will need to establish a flood presence and consumers will need to change their mentality to move away from the NFIP, which has been a strong, consistent market. As the NFIP continues to improve its functionality and offer grandfathered or otherwise attractive rates, consumers may be hesitant to switch providers.

On the reinsurance side, some of the same issues apply related to modeling, underwriting and pricing. There are also issue with balance of premium to limit, the need for better primary company reporting of existing flood exposures (personal and commercial, primary and excess), and the potential correlation with other perils / aggregation.

These hurdles are mostly surmountable, but it will take good legislation, knowledge, marketing and technology, patience and some willingness from many participants in order to succeed in the flood (re)insurance space. The upside to writing flood is increased/new premium – some part of the NFIP's earned premium, which was $3.3B in 2016[13], and the untapped market described above. While premium is the main motivation to writing flood, primary insurers will also have the ability and an opportunity to potentially provide more coverage and a better experience for clients. For those carriers and reinsurers who are willing to invest in and take hold of the best distribution network for them, flood can be a win-win for all. **<<<**

12 Roy Wright, *Increasing Flood Insurance Resilience – The Role of Reinsurance*, FEMA, https://www.fema.gov/blog/2017-01-03/increasing-flood-insurance-resilience-role-reinsurance (last updated June 2, 2017).

13 "Total Earned Premium by Calendar Year," FEMA, https://www.fema.gov/total-earned-premium-calendar-year (last updated Apr. 4, 2017).

The Intermediaries & Reinsurance Underwriters Association

Founded in 1967, the IRUA today has over 30 Regular member companies engaged in the assumption, placement or purchase of property/casualty treaty reinsurance. This number is misleading as corporate membership benefits extend to all members of a Group, such as Fairfax or Munich Re. In 1993, the IRUA expanded its membership from solely reinsurance underwriters to include reinsurance intermediaries. In 2002, the IRUA expanded its membership further to include ceding company reinsurance departments. In April 2017, the membership criteria extended to include Individuals not employed by or affiliated with an organization otherwise eligible for Regular membership and it is anticipated that this will be of interest to consultants, attorneys, academics, accountants, arbitrators and other professionals. Also, for smaller entities, both risk-bearing and intermediaries, a 50% discount of Regular membership is available. While all IRUA members primarily operate in the U.S. reinsurance market, we now have members from the London, Europe and Bermuda markets as well.

The IRUA is a not-for-profit 501c(6) corporation, organized for the purposes of reinsurance education, networking and research and the dissemination of information relevant to the reinsurance industry. The IRUA does not speak on behalf of its membership on industry issues nor does it engage in lobbying.

Each Spring the IRUA holds an Annual Conference for its members during which the Annual Meeting of Members takes place and where officers and directors in nomination are voted in. In addition, a variety of seminars and workshops covering claims and/or underwriting and/or career enhancing topics are held throughout the year and are open to members and non-members. Every two years the unique Next Generation Reinsurance Leadership seminar is held in New York City. Experienced reinsurance and financial industry professionals shared their life and career experiences with an enthusiastic group of younger professionals who will be the future leaders of the reinsurance industry. The next seminar is scheduled for 2018.

Commentary or Corrections?

The IRUA welcomes your comments and suggestions, as well as information regarding errors or omissions that call for correction.

Please send your electronic message to mcs@irua.org or by telephone at 718-892-0228.