Annual Report 2014/2015
THE GENEVA ASSOCIATION
The Geneva Association

The Geneva Association is the leading international insurance think tank for strategically important insurance and risk management issues.

The Geneva Association identifies fundamental trends and strategic issues where insurance plays a substantial role or which influence the insurance sector. Through the development of research programmes, regular publications and the organisation of international meetings, The Geneva Association serves as a catalyst for progress in the understanding of risk and insurance matters and acts as an information creator and disseminator. It is the leading voice of the largest insurance groups worldwide in the dialogue with international institutions. In parallel, it advances—in economic and cultural terms—the development and application of risk management and the understanding of uncertainty in the modern economy.

The Geneva Association membership comprises a statutory maximum of 90 chief executive officers (CEOs) from the world's top insurance and reinsurance companies. It organises international expert networks and manages discussion platforms for senior insurance executives and specialists as well as policymakers, regulators and multilateral organisations. The Geneva Association’s annual General Assembly is the most prestigious gathering of leading insurance CEOs worldwide.

Established in 1973, The Geneva Association, officially the “International Association for the Study of Insurance Economics”, has offices in Geneva and Basel, Switzerland and is a non-profit organisation funded by its Members.
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Dear fellow Members,

Following the General Assembly last year, we had the pleasure of welcoming Anna Maria as the Secretary General of The Geneva Association on 1 September 2014. I am pleased to report that she is already well established and has developed a strong strategy for the Association, which she will propose to Members at the time of the General Assembly.

In 2014, the Board tightened the focus of the Association’s long-term research into four key areas: financial stability, extreme events and climate risks, global ageing and liability. These long-term areas of analysis provide the core themes of the Association’s research, while two other subjects will also serve as near-term research priorities: the global protection gap and cyber risks. I am excited about the results the research in all these critical areas will produce in 2015.

Since the financial crisis, there has also been considerable change in the way our industry is being supervised and regulated at the global level. The past year has marked the culmination of the FSB’s work on the development of insurance resolution strategies. At the IAIS level, the development of the higher loss absorbency requirement and a global insurance capital standard are still works in progress. The Geneva Association and its relevant working groups have developed input to ensure that the outcomes of this process are appropriate and adequate for our industry. This was achieved through a variety of channels, not least consultation responses, international colloquia and the Association’s annual high level meeting between its Board Members and invited senior representatives of supervisory authorities.

Reflecting the increasing role of the industry in this key economic region, The Geneva Association’s work has also been balanced to place more focus on Asian issues and developments. Already in March 2015, the Association joined Tokio Marine in hosting a meeting at the third UN World Conference on Disaster Risk Reduction in Sendai, Japan. Looking ahead, our General Assembly this year will take place in Singapore on 14–16 May and will provide a balance of Asian perspectives among the wider discussions on global insurance issues.

Indeed, this year’s Assembly takes place at a time of significant geopolitical uncertainty and unprecedented economic imbalances, not only in Asia, but across...
the globe. We have a strong line-up of experts for the discussions who will provide perspectives on many of these issues with a view on their implications for our businesses around the world.

I look forward to seeing many of you there.

Mike McGavick
Chairman of The Geneva Association
SECRETARY GENERAL’S STATEMENT

I am very pleased to address the Members in this first annual report since my appointment in September 2014.

Over the course of the last year, the Association has continued its work representing its Membership in the regulatory dialogue for global systemically important insurers (G-SIIs) and internationally active insurance groups (IAIGs). This work involved significant bilateral discussion with regulators in parallel with responses drafted together with Members through the more formal consultation processes. Over the course of 2014, The Geneva Association held two international colloquia on international capital developments, alongside our annual PROGRES regulation and supervision conference in February 2015. We maintain a constructive dialogue with leading supervisors and regulators and expect to expand this valuable form of interaction in the year ahead.

In July 2014, the joint Geneva Association and Institute of International Finance (IIF) working group provided its response to the consultation on the development of a basic capital requirement (BCR) for G-SIIs. After a series of field tests, the BCR was formally accepted by the G20 during their meeting in Brisbane, 15–16 November 2014.

At an IAIS hearing on the principles of the international capital standard (ICS) in October, we represented our Members by presenting the output of The Geneva Association and IIF working group before the IAIS Executive Committee.


Also in December, the IAIS issued a consultation on a new ICS, to which the joint working group responded in February 2015. The consolidation of an industry perspective on the ICS was particularly challenged by a lack of common global accounting and valuation standards, and by the current overlap of this ICS design process with that of ongoing local regulatory developments in Asia, the U.S., Latin America and Europe. The Association continues its regular dialogue on ICS with policymakers and supervisors on a bilateral basis and will remain very engaged in all discussions on the development of the new standard into 2016.
At the General Assembly in May 2014, some 68 CEOs signed the Climate Risk Statement of The Geneva Association, a set of guiding principles on the substantial role insurance can play in global efforts to tackle climate risk. This represents the largest consolidation of industry leadership signatories on any insurance climate initiative to date. In October, the Extreme Events and Climate Risk working group held its annual seminar in New York on the implications of climate change for urban development. Entitled “Cities under siege—Extreme events, resilience and the role of insurance”, the conference examined the implications of climate risks for China and the U.S. as well as internationally, and sought to draw some of the lessons learnt from recent international events.

In November, the Association published a first report on the current state of the protection gap in non-life, life and pensions insurance, The Global Insurance Protection Gap—Assessment and Recommendations. As a next step, we will issue a series of additional reports, each focusing on specific areas identified in this first report where severe protection gaps exist. Not least, a report on the protection gap in relation to Asian flood risks will be discussed at the forthcoming General Assembly in May.

Also in early November, as global concern mounted at the growing Ebola crisis, The Geneva Association ran a conference in Madrid, hosted by MAPFRE, on emerging health risks, including the threat of pandemics on the insurance industry. The meeting participants heard from industry and academic experts on environmental health and insurance issues and the increasing importance of big data and data analytics for the life and health insurance industries.

I look forward to seeing many of you again at the General Assembly. For those not able to be present, I will be making every endeavour to meet you in the year to come; in the meantime, I will be sending you an update on the operational and strategic outlook for the Association. Over the course of 2015, we will also be announcing a number of key appointments that will support the new structure of the secretariat and enhance our capabilities.

I would like to thank the Membership and the Board for their warm welcome and support since my joining.

Anna Maria D’Hulster
Secretary General,
The Geneva Association
BOARD OF DIRECTORS

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OVERVIEW OF THE GENEVA ASSOCIATION

Founded in 1973 by the CEOs of leading insurance companies, The Geneva Association is an international insurance think tank that produces and distributes high-quality research and analysis on global strategic insurance and risk management issues.

The Geneva Association is a non-profit organisation funded by its Membership comprising a statutory maximum of 90 insurance and reinsurance CEOs; it is governed by its Board of Directors. The General Secretariat handles the daily operations of the Association and its work is directed by the Secretary General.

The Association’s research promotes policy-related, public discussions among its Members, academics, standard setters, policymakers, governments, international organisations and the public at large. It interacts directly and constantly on global insurance issues with a broad spectrum of relevant international organisations, such as the International Association of Insurance Supervisors (IAIS), the Financial Stability Board (FSB) and the G20, as well as intergovernmental organisations, non-governmental organisations and national bodies.

The Association’s objective is to educate and develop understanding on the unique role and importance of insurance in economies and for societies through publications, conferences and active discourse with policymakers and others. It strives to be known as the best and most influential research think tank on global insurance issues in the world.

THE GENEVA ASSOCIATION RESEARCH TOPICS

The Geneva Association’s research takes a strategic look at issues that affect the global community from a perspective of sustainability, examines the needs of society, and determines how the insurance mechanism can contribute to addressing those needs. In 2014/2015, the Association has focused primarily on three major research topics:

Financial stability and regulation

Since the financial crisis erupted in 2008, policymakers around the world have been working on improving financial market oversight in order to increase global financial stability. The role of insurance has been an area of particular focus.

Throughout this period, The Geneva Association has pursued an intensive dialogue with regulators, supervisors, central bankers and the insurance industry to develop research that tackles the issues that emerged during the process (see page 15).
Extreme events and climate risk

The human and economic impact of natural catastrophes and extreme events has radically increased since the turn of the century, causing major economic losses and human suffering. Societal resilience, loss mitigation and the protection of populations and livestock require the involvement and cooperation of multiple actors: governments, corporations and individuals, as well as the insurance sector.

The Geneva Association analyses the existing and potential role of insurance and risk management in tackling the challenges posed by extreme events and climate risk. In particular, it takes a close look at disaster risk reduction, where insurance can play a role—e.g. in public-private partnerships—to reduce the impact of climate-related extreme events (see page 23).

Global ageing

The financing of pension systems has not been adapted to account for changing demographics (improved longevity and lower fertility rates). Adding to this concern is the increase of age-related illnesses and the long-term care costs of ageing populations.

The Geneva Association continues to research funding solutions, including post-retirement work and how the insurance mechanism can support governments and individuals in financing retirement and age-related health costs (see page 29).

THE GENEVA ASSOCIATION EVENTS

The Geneva Association organises or co-organises approximately 15 conferences and seminars every year. These include, but are not limited to, the Insurance and Finance, Regulation and Supervision, Extreme Events and Climate Risk, and Health and Ageing seminars and conferences; the Annual Circle of Chief Economists (ACCE); the Annual Round Table of Chief Risk Officers; the Meeting of Chief Investment Officers; the Management of Risks in the Economy Seminar (M.O.R.E.); and, of course, the annual General Assembly (see page 43).

THE GENEVA ASSOCIATION PUBLICATIONS

The Geneva Association issues a number of publications throughout the year. These include six newsletters published twice a year in the areas of Insurance and Finance, Regulation and Supervision, Health and Ageing, Life and Pensions, Risk Management, and Insurance Economics, white papers by research working groups (e.g. IAIS Basic Capital Requirements Consultation), ad hoc topical reports (e.g. The

THE GENEVA ASSOCIATION PRIZES, AWARDS AND GRANTS

Every year, The Geneva Association presents an award jointly with the International Insurance Society (IIS) on applied research in the insurance area. The Association also awards the prestigious Ernst Meyer Prize for doctoral theses annually and offers two grants for research on insurance economics (see page 44 for more details).

THE ASSOCIATION’S OBJECTIVE IS TO DEVELOP UNDERSTANDING ON THE UNIQUE ROLE OF INSURANCE IN ECONOMIES AND FOR SOCIETIES.
2014/2015 HIGHLIGHTS

20 May 2014—Climate Risk Statement
Following The Geneva Association’s 41st General Assembly in Toronto, 68 of the world’s leading insurers confirm their commitment to The Geneva Association’s Climate Risk Statement—a set of guiding principles on the substantial role insurance can play in global efforts to tackle climate-related risks.

2 June 2014—New Secretary General
Anna Maria D’Hulster, former Chief Financial Officer and member of the Management Board of swissQuant Group AG, Zurich, is named Secretary General of The Geneva Association.

July 2014—Academic Influence
The Geneva Association’s flagship academic journal, The Geneva Papers on Risk and Insurance—Issues and Practice receives the highest impact factor in its history (0.677) from Thomson Reuters’ Journal Citation Reports.

8 August 2014—IAIS response
The Geneva Association responds to the IAIS Basic Capital Requirements (BCR) Consultation, welcoming the increased clarity though highlighting the need for comparability, a level playing field among insurers, and consistent application of the BCR.

22 September 2014—International Colloquium on International Capital Standards
The Geneva Association organises an international colloquium on international capital standards (ICS) in Munich, hosted by Munich Re. The colloquium provided an interactive dialogue about the design and implementation of global capital standards for G-SIIs and internationally active insurance groups (IAIGs).

23–24 October 2014—Extreme Events and Climate Risk Seminar

4 November 2014—Insurance and Finance Seminar
The Geneva Association organises its 10th Insurance and Finance Seminar, hosted by Prudential plc and held in London. The seminar focused on “Today’s Issues and Opportunities”, highlighting issues of growth, innovations, capital markets, investments, opportunities in underinsurance, climate challenges, and cyber and regulation risks.

6–7 November 2014—Health and Ageing Conference
The 11th Health and Ageing Conference of The Geneva Association, hosted by MAPFRE Foundation, focuses on new and emerging health risks, how they impact health and health-financing mechanisms, and how insurance covers and manages these risks (behavioural health, environmental health and climate risk, new health technology, pandemics and antimicrobial resistance).

19 February 2015—Regulation and Supervision Seminar
The Geneva Association organises its 31st Regulation and Supervision (PROGRES) Seminar, focusing on the first experiences and remaining challenges with the enhanced supervision and regulation of global systemically important financial institutions (G-SIIs), recovery and resolution plans, the global insurance capital standard (ICS), and consumer protection and market conduct.

20 February 2015—2nd International Colloquium on International Capital Standards
A second colloquium on International Capital Standards is held in Basel. In an interactive dialogue with regulators and supervisors, panellists focused on the Global Insurance Capital Standard (ICS) including presentations on possible valuation approaches to underpin the ICS and specific design features.
FINANCIAL STABILITY
AND REGULATION

Since the Financial Stability Board’s (FSB) July 2013 announcement that the International Association of Insurance Supervisors (IAIS) will develop a quantitative capital standard for internationally active insurance groups (IAIGs), The Geneva Association has concentrated its work on international capital developments: the basic capital requirement (BCR), higher loss absorbency (HLA) and the global insurance capital standard (ICS). Furthermore, The Geneva Association continued its policy and research work on insurance resolution, a topic on which the FSB has now taken the lead.

IAIS consultations on the BCR and the global ICS

The IAIS published its second consultation on the BCR as a foundation for HLA on 9 July 2014. The Geneva Association, jointly with the Institute of International Finance (IIF) and a working group of member company representatives, responded to the consultation. The response raised a particular concern that the definition and restrictions were applied to capital resources, and called for a definition that was compatible with existing national regimes. If these have to undergo change, then transitional provisions need to be anticipated. Furthermore, the answer explained that the appropriateness and impact of the BCR could only be fully assessed once the HLA had been developed. In addition, further clarification was needed in certain areas, such as the treatment of margin over the current estimate (MOCE), the classification of assets and liabilities into segments, and the definition of qualifying reinsurance.

The IAIS finalised its proposal, the FSB reviewed it, and the BCR was endorsed by the G20 in November 2014.

At the same time, the FSB clearly stated that the ICS on risk-based capital requirement is expected to replace the BCR in its role as the foundation for HLA. While the IAIS has begun its work on HLA as well as on ICS, it has given the ICS some priority and postponed the consultation on HLA to June 2015. Consequently, it only published one consultation paper on ICS, on 17 December 2014. The consultation focuses on identifying a standard method for determining the ICS requirement, a valuation approach, and the definition of qualifying capital resources. The joint Geneva Association/IIF working group responded in February 2015 highlighting a lack of consensus among the industry and regulators driven by local standards and regulatory practices, as well as local regulatory dynamics in a number of regions. The working group highlighted the fundamental importance of international standards and registered concern about the ambitious timetable set for their completion.
FINANCIAL STABILITY AND REGULATION

IAIS global insurance capital standard

The economic crisis of 2008 has generated a long-lasting impact on the world economy and the global financial system, triggering the development of worldwide financial regulatory reforms. Among them was the development of global capital standards for insurers. IAIS, after launching the first two steps—BCR and HLA, both targeted at G-SIs globally and defined according to a specific set of criteria by the IAIS—introduced the third step, a risk-based group-wide global insurance capital standard (ICS). IAIS expects finalisation of the ICS development by the end of 2016, and its application to global systemically important insurers (G-SIs) and other internationally active insurance groups (IAIGs) by 2019.

IAIS is developing the concept, scope and objectives of the ICS in conjunction with insurance industry players. So far, this has been conducted through stakeholder meetings attended by The Geneva Association in Quebec (May 2013), Amsterdam (October 2014) and Newport, LA (February 2015), consultations and field tests.

The Geneva Association’s international colloquia on international capital standards

Given the focus on the development of international capital standards, the Geneva Association organised its first international colloquium on 22 September 2014 in Munich, bringing together capital experts and supervisors at an international level to discuss initial thoughts and the design features of the new capital standards. The seminar was very well attended and enabled a lively dialogue, which—due to its success—was continued on 20 February 2015 in Basel. This second edition of the colloquium was therefore dedicated to the global ICS and focused on possible valuation approaches, capital resources and capital requirements.

IAIS 2014: ICS consultation

In December 2014, IAIS issued the first ICS consultation document with the goal of sounding the industry’s position on technical questions underlying the ICS.

Given the challenging timeline and the scope of the consultation document, The Geneva Association joined forces with the Institute of International Finance (IIF) in order to provide an extended discussion platform for a larger number of members. The high diversity of insurance groups included in the Geneva Association/IIF working group is triggering a wide range of views with respect to the basic ICS concepts and objectives. Consequently, Members perceive discussions on the technical level as being premature and not efficient as long as a mutual understanding on the
ICS concept has not been achieved. A key concern for many insurers is whether, and to what extent, a new capital requirement might contradict already existing standards. In light of this, Members believe that the mutual understanding of basic concepts is essential for further discussion and ICS development, namely:

**The specific goal of the ICS**
Policyholders’ protection and financial stability are cited by IAIS as the major goals of the ICS. Although Members support policyholders’ protection as a main goal, they question whether this would not be more adequately achieved by local jurisdictions. Furthermore, since financial stability is already addressed by the FSB systemic risk framework and G-SIIs policy measures, it is not clear how financial stability can be promoted by the ICS. Finally, these two objectives may not be optimally covered by one single framework and, consequently, it may not be appropriate to consider them under one single principle.

**Practical implementation of the principles-based framework**
Members are generally supportive of a principles-based framework as outlined in the 14 October 2014 submission in connection with the IAIS Observer Hearing in Amsterdam. However, there is a range of views as to what a principles-based ICS would mean in practice. Members define a principles-based framework in different ways and express different rationales for why a principles-based framework is preferable to a rules-based approach. In defining a principles-based approach, Members differ as to the extent to which they would rely on local versus global requirements, and the level of detail needed in the ICS principles.

**The goal and definition of comparability**
Comparability is seen as one of the major ICS concepts and, as such, requires a full understanding of what should be compared, how and at which level. Comparability between insurance groups has significance only when the comparison is made on the basis of risk-sensitive measures that factor in business models, underlying risk and regional characteristics. Comparing two companies solely on the basis of one single value (ratio) is not seen as meaningful. Two companies with identical ratios could have completely different risk profiles, portfolio compositions and business models, which would not be evident to supervisors based on the disclosed ratio alone.

**The use of internal models**
A majority of the Members support an ICS that would permit the use of full or partial internal models, including models developed by external vendors, subject to supervisory review and approval for use. Internal models facilitate a risk-sensitive approach
to supervisory and insurers’ internal assessments of capital adequacy by considering an insurer’s idiosyncratic risk profile.

**The ICS as a capital-raising exercise**

Members believe that the ICS should not be intended as a capital-raising exercise for IAIGs and G-SIs as a whole. This view would be consistent with public statements made by the FSB that observe that the capital position of the insurance industry as a whole is sound and not in need of across-the-board increases.

**The timing of the ICS**

A majority of Members have concerns that the proposed timing of the ICS does not allow time for existing national and regional regimes to gain traction and for the IAIS to consider the lessons learned from the implementation of new standards in different jurisdictions. The limited time period prior to the proposed 2016 implementation date also raises questions as to the opportunity for meaningful industry feedback as the ICS proposals are further developed by the IAIS. Members are concerned that quality of the ICS could be jeopardised by the present deadline.

**Open issues**

**Standardisation**

Challenges remain in creating a standard that covers the entire balance sheet, is simple in approach, has some risk sensitivity and is globally comparable.

**Policyholder protection**

Global convergence of the policyholder protection level remains an outstanding question.

**Comparability**

The definition and level of comparability need to be further clarified.

**Accounting systems**

The basic ICS objectives and harmonisation of balance sheets under different accounting standards into a common valuation format require further clarifications. The valuation of insurance liabilities (long term) is a major challenge in this area.

**Regional regulations**

Divergent views of the North American and EU companies, with regard to the ICS, remain a real concern to the industry. It is clear that there are both similarities and differences between these regimes. Further efforts at the domestic and international levels could shape the playing field of the insurance companies.

**FSB G-SIs designations for reinsurers postponed by another year**

The designation of nine companies as G-SIs by the FSB was confirmed in November last year, with no changes compared to the designation in
2013. The designation of reinsurance companies, which was foreseen in 2014 after further detailed analysis, was again postponed by another year.

FSB consultation on recovery and resolution planning for systemically important insurers

The FSB published its consultation paper *Recovery and Resolution Planning for Systemically Important Insurers: Guidance on Identification of Critical Functions and Critical Shared Services*. The Geneva Association responded jointly with the IIIF to the consultation and highlighted that the proposed definition of “critical functions” is not appropriate for the insurance sector and is overly broad in a way that distracts from useful identification of the few activities that truly might have a material impact on both the financial system and the real economy. It should not include non-systemically risky functions.

The consultation documentation once again confirmed the FSB’s fears that the resolution of an insurer could lead to fire sales, and the insurer would stop providing liquidity in the capital markets through purchases of debt. Therefore, the joint answer reiterated the description of the insurance business model and the low exposure to illiquidity risk given that insurers hold and match assets to cover their liabilities.

10th Insurance and Finance Seminar “Today’s Issues and Opportunities”
London, 4 November 2014

The Geneva Association’s 10th Insurance and Finance Seminar included three panels and three keynote speakers and was attended by CEOs, insurance executives and industry experts. In discussing the issues facing the industry today, alternative capital and low interest rates emerged as the main challenges. Speakers emphasised that, at this stage, collateralised reinsurance and catastrophe (cat) bonds have dominated the alternative capital market. This alternative capital placed pressure on pricing and profitability, especially because of low catastrophe losses in recent years.

Positive aspects of the liquidity trend were highlighted, showing the attractiveness of the insurance industry and the numerous opportunities available for insurers utilising and promoting their expertise in risk management. Furthermore, the pressure on underwriting and profitability required the development of new fields and products. This could be done through the use of big data analytics in search of new trends and also by moving talents from profit centres to centres for innovation.

Other challenges and opportunities discussed were on the assets side. Since governments and regulators tend to protect the debtor rather than the creditor, insurers, being significant investors, are less protected. The consequences of national governments extending their extraterritorial reach has become problematic for insurers. On the other hand, the position of insurers as long-term investors gives them opportunities to collaborate with governments on infrastructure investment and to enter uninsured markets.

The topics of regulatory risks gravitated around the challenge for a global industry to respond to dynamic national regulation and the unintended consequences of new regulatory initiatives for global systemically important insurer (G-SII) companies and internationally active insurance groups (IAIGs). As was the case in prior years, the need to separate the insurance model from that of banks was underscored.

Last, but not least was the topic of cyber risk, both a challenging topic and a source of great opportunities. The seminar’s participants insisted on the major need to make use of big data analytics and the best talents from hi-tech industries.
The IAIS’ new organisational and governance structure

The IAIS General Meeting voted in October 2014 to discontinue observer status as of 2015. As a consequence, industry representatives are no longer regularly invited, either to IAIS committee meetings or the IAIS Annual Conference. Instead, the IAIS will work with stakeholders through meetings and public consultations to gather the industry’s input. More details about the relevant procedures will be known in 2015.

Looking ahead to 2015/2016

Also in 2015/2016, the ICS will occupy industry, supervisors and regulators alike, given the very ambitious timeline in finalising all three elements by 2016.

The next step in the architecture will be the development of HLA, which is meant to be adopted by the G20 in November 2015. In spite of the longer timeline, until 2016, the development of the ICS remains the biggest challenge ahead, as it is meant to apply to a far larger group of insurers. It therefore needs to be applicable to a greater variety of insurance groups.

The discussion about the valuation approach alone will sharply contrast regional differences, and will challenge supervisors’, regulators’ and companies’ willingness to engage in discussions about yet another regime with which they have not yet been confronted. At the same time, the designated G-SIs need to refocus once again on finding a foundation for HLA, which is not only adequate for G-SIs, but also for all IAIGs as a general capital requirement.

U.S. and Japan Life Insurers Insolvencies Case Studies
Lessons learned from resolutions

Against the background of the FSB’s work on recovery and resolution planning for G-SIs, The Geneva Association analysed a series of case studies of U.S. and Japan life insurers insolvencies and published the results in January 2015. Interestingly, though geographically diverse, the regulatory responses were similar. The regulators put a moratorium on surrenders of policies, and adjusted the contracts to require steeper surrender charges and allow provision changes. The case studies demonstrated the importance of broad implementation of the general resolution powers the FSB suggests in its Key Attributes of Effective Resolution Regimes for Financial Institutions. Upcoming additional research will analyse additional case studies of insurers that faced financial instability.
31st Regulation and Supervision (PROGRES) Seminar
“Enhanced supervision and regulation: first experiences and remaining challenges”
19 February 2015, Basel

Home and host supervisors were present at the seminar, along with representatives from designated global systemically important insurers (G-SiIs). A host supervisor, responsible for the supervision of six of the designated nine G-SiIs, reported that the supervision of G-Sii subsidiaries as such does not differ from the supervision of domestically owned firms, but that special attention was required for the insurance risks ceded to their group-affiliated entities outside the host jurisdiction. All supervisors stressed that new regulation was not a simple read-across from banking. The industry remained sceptical, as the development of higher loss absorbency (HLA) is still under way.

With regard to crisis management and recovery and resolution plans, company representatives who reported on the development of their recovery plans considered it a good exercise to understand how money moves within the company and where capital and liquidity reside in a group, especially under stress scenarios. One company representative explained that their own analysis had shown that a subsidiary-based insurance group was generally resolvable in its current structure so that, in contrast to banking, a multiple point of entry approach was desirable.

The global insurance capital standard (ICS) was also on the agenda, with panellists warning that hasty development entailed the risk that products are withdrawn from the market, investments curtailed and capital cushions become excessive. They highlighted several areas which were crucial to get right: (1) discount rates; (2) the definition of capital resources; (3) the recognition of risk mitigation including diversification; (4) calibration and (5) operational feasibility. The objective of achieving comparability was discussed in detail. It was especially questioned who would assess comparability, what would be compared and what level of comparability was intended.

Finally, the panellists agreed that there had been a lot of recent developments in the areas of consumer protection and market conduct, but, due to the priority given to financial stability measures, market conduct was not receiving the same attention as the latter. They noted that consumer protection, also, increasingly drove the insurance companies’ thinking, as they needed to be responsive to a competitive environment and the new and increasing expectations of policyholders. The panellists noted that the product development process was handled differently in various jurisdictions. While some supervisors were not involved in the product development process, others started an early dialogue with the companies during the product development phase. The panellists were in favour of conduct regulation which supported a good insurance firm culture and a well-functioning insurance market that required as little intervention as possible.
EXTRAORDINARY EVENTS AND CLIMATE RISK

Last December, the Financial Times announced that 2014 had been the warmest year on record in Europe in 500 years. Regular news stories feature analyses of rising sea levels due to the warming of the oceans, as well as severe windstorms, flooding, droughts and wildfires.

Recent studies, as highlighted already in 2013 in the Fifth Assessment Report (AR5) of the Intergovernmental Panel on Climate Change (IPCC), strongly indicate that, not only is climate change happening, but that the changes are occurring faster than earlier projected. The prospect of extreme climate change and its potentially devastating economic and social consequences are of great concern to the insurance industry.

The Geneva Association has been researching this growing trend for several years, with a view of assessing how insurance can contribute to the global debate and to improving disaster resilience. On the occasion of the General Assembly, several Members of The Geneva Association were interviewed (see below) on the increasing frequency and severity of extreme events, climate risk, and what role the insurance industry can play in mitigating the impact of climate-related extreme events. This role includes encouraging a long-term view of the issue; lending its experience in risk assessment, pricing and management at the governmental level; providing financial support at the individual level; participating in policy decisions involving mitigation measures (e.g. building codes); and long-term investment in infrastructure.

Michael Butt and Dean Connor speak about climate risk at the 2014 General Assembly in Toronto. See video interviews on our dedicated webpage.

Michael Butt, Co-Chairman of The Geneva Association’s Climate Risk and Insurance working group, and Chairman of AXIS Capital Holdings Limited

Dean Connor, CEO of Sun Life Financial Inc.


Left: Strong typhoon Phanfone slammed into Japan. High waves batter a breakwater at a port at Kihou town in Mie prefecture, central Japan on 6 October 2014.
The Geneva Association’s Climate Risk Statement is a set of guiding principles on the substantial role insurance can play in global efforts to tackle climate-related risks. It provides the foundations on which the direction of future climate-related initiatives by The Geneva Association will be based and was finalised among leaders of the world’s largest insurers at the General Assembly in Toronto. Vice President Al Gore commended Members of The Geneva Association for signing this statement.

Climate Risk Statement of The Geneva Association

The new Fifth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC) strongly indicates that climate change is happening, mankind's influence is very material and the changes are occurring faster than earlier projected. The prospect of extreme climate change and its potentially devastating economic and social consequences are of great concern to the insurance industry.

Against this backdrop, we, the leaders of the world’s largest insurance and reinsurance companies as assembled in The Geneva Association, want to make known our view through the following key messages.

Customers

- We are committed to enhancing our research capabilities in order to provide a better evaluation and management of climate risks.
- We promote mitigation efforts by developing products which incentivise offsetting or reducing greenhouse gas emission levels.
- We are willing to design insurance products to support low-carbon energy development projects and to help attract investments to such projects.
- As a major institutional investor, the insurance industry encourages mitigation and adaptation efforts, such as investing in low-carbon energy projects.

Policymakers

- The insurance industry is prepared to help counter climate risks through active cooperation in implementing building codes or similar means which encourage the use of sustainable practices.
- We offer to work closely with policymakers on communicating to our customers their climate risk levels, possible strategies of mitigation and adaptation, and in quantifying the financial benefits of those strategies.
- The insurance industry provides innovative solutions for climate risk issues. These include funding relevant research and providing tools to its customers to assess and counter climate risks.
- We recognise the significant benefit of pooling climate risks. We urge policymakers to collect robust data and make it freely available to allow risk assessment and to facilitate efficient solutions where premiums are risk-based.

United Nations

- The insurance industry is uniquely positioned to provide specialised services for countries and businesses facing climate risks worldwide.
- Insurers have the expertise to develop a broad range of affordable private insurance solutions for climate risks.
- Insurance mechanisms are an effective tool to promote climate-related risk management and reduction.
- We recognise that no stakeholder can succeed alone in solving the challenges of climate change. Insurance can and should be a strong complementary mechanism in a wider framework of adaptation and disaster risk reduction.

Insurance industry

- We encourage political processes to work towards a better understanding of the potential costs of climate change and the advantages of market-based solutions.
- We continue to work towards further reducing the relatively moderate-carbon footprint of the insurance industry.
- We are willing to play a major and concerted role in the global efforts to counter climate risks.

The Geneva Association offers a unique platform to pool the knowledge and expertise of the insurance sector. It acts as a hub for expert networking within the industry as well as with external communities. The Geneva Association strives to create opportunities for the insurance industry to join their forces to deal with climate risks where relevant and appropriate.

Toronto, 16 May 2014
Also at its last General Assembly in Toronto (May 2014), The Geneva Association invited guest speaker Al Gore to speak to its Members on this pressing topic (see General Assembly Review 2014).

Former U.S. Vice President, Chairman of Generation Investment Management and the founder of a number of non-profit organisations including the Alliance for Climate Protection, Al Gore was the co-recipient, with the IPCC, of the 2007 Nobel Peace Prize for his work in climate change activism. His support for the Climate Risk Statement, signed by 68 Members of The Geneva Association at or shortly after the General Assembly in Toronto (see previous page), highlights the leadership role the insurance industry can play in disaster risk reduction initiatives.

*Cities under siege—extreme events, resilience and the role of insurance*

**6th Extreme Events and Climate Risk Seminar in New York**

With the objective of deepening the knowledge pool on the impact of climate change, the annual Extreme Events and Climate Risk Seminar of The Geneva Association was held on 23–24 October 2014 in New York, in collaboration with XL Group.

Examining how cities are confronted with climate-related risks such as rising sea levels, increased flooding and severe wind events, the seminar provided a macro overview as well as lessons learned from natural disasters around the world. Dr Peter Höppe, Head of Geo Risks Research, Corporate Climate Centre at Munich Re spoke about why cities are especially affected by climate change, while Robert Muir-Wood, Chief Research Officer at Risk Management Solutions in London, questioned whether “water is the new wind”.

The conference also examined how to build more resilient cities. In particular, Madeleine Varkay, Principal Private Sector Development Specialist at the Asian Development Bank, spoke about the role of the public and private sectors; and Mark Way, Head of Sustainability Americas Hub, Group Risk Management, at Swiss Re America Holding Corporation, highlighted the economics of building urban resilience.

Flood risk was an important issue at the event, with Dr Svenja Surminski of the London School of Economics speaking on the topic of “Flood insurance developments in Europe: fit for the future?”, Steve Verney, Executive Vice President and Chief Risk Officer at Allstate Insurance Company, who talked about how to promote resiliency to U.S. flood risk with a sustainable insurance
marketplace; and Gregory Lanshe, AVP–Property Director, Risk Engineering North America, Zurich Services Corporation, presented “Measuring flood resilience to demonstrate the value of pre-event risk reduction and preparedness”.

A selection of panellists from The Geneva Association’s 6th Extreme Events and Climate Risk Seminar, hosted by XL Group in New York, 23–24 October 2014, respond to questions on flood risks, the impact of climate change on cities, and the role of insurance in disaster risk resilience.

An examination of the geographic aggregation of catastrophic risk

In 2014, a paper entitled “An Examination of the Geographic Aggregation of Catastrophic Risk”, by Randy E. Dumm, William T. Hold Professor of Risk Management and Insurance, Florida State University, U.S.; Mark E. Johnson, Professor of Statistics, University of Central Florida, U.S.; and Charles C. Watson Jr., Watson Technical Consulting, U.S.; received the prestigious Shin Research Excellence Award, jointly offered by The Geneva Association and the International Insurance Society (IIS). This prize is designed to foster original applied research in the insurance area addressing issues of concern to global insurance leaders by examining subjects which directly influence business operations and operational
business issues on a practical level. The winning paper is published and distributed by both the IIS and The Geneva Association and is an example of the role of the Association in furthering the understanding of risk management and insurance issues.

**Abstract**

The debate in the U.S. about establishing a mechanism for insuring catastrophic wind risk at the national level pre-dates the intense 2004–2005 hurricane seasons. The prevailing argument against establishing any larger risk pool is that it would create a subsidy for the higher risk exposures. To determine whether benefits do accrue by aggregating catastrophic risk across increasingly wide geographic areas, the paper uses catastrophe models to evaluate the behaviour of residential property portfolios within the state of Florida and for a larger risk pool that includes multiple combinations of coastal states in the southeastern U.S. The authors find that geographic aggregation does not inherently subsidise high-risk exposures, reduces uncertainty, and reduces required reserves relative to total exposure for the least frequent and more severe events. This finding holds true for all state combinations evaluated in this study.
The world is currently experiencing an unprecedented demographic shift, with life expectancy on the rise and fertility rates dropping. Today’s individuals are expected to live longer than previous generations, but part of these extra years of life may not necessarily be healthy years.

This combination has exacerbated the challenge of financing retirement and health care for the elderly, creating enormous funding challenges for governments globally. The Geneva Association has often called for the development of new forms of financing, in particular in the area of insurance.

Last December, The Geneva Association met with Dr John Beard, Director of the Department of Ageing and Life Course at the World Health Organization (WHO), to examine the challenges societies face in managing health-care costs for the elderly and sustainable health systems, and how insurance can play a role in helping society address the needs of ageing populations.

What do you see as the major health challenges facing ageing populations in developing countries today?

Population ageing is a global phenomenon affecting almost every country in the world, and some of the fastest ageing is occurring in low- to middle-income nations, particularly the latter—China, Vietnam and Chile, for instance, will have a similar proportion of older aged people by 2050 as Japan does now.

For these countries, ageing is occurring much faster than it has historically: what took place in France over 120 years, those countries are experiencing over 20–25 years. This presents certain challenges, but also some advantages. On the one hand, it means they have to act very quickly; if they don’t, it will be real struggle to make the necessary adjustments and transition. On the other hand, those countries that are experiencing a shift over a longer period of time have to deal with generally rigid structures that are more difficult to change.

While reform is primarily required in developed countries, emerging markets are starting from scratch in setting up systems that wealthier nations take for granted. They need to be thinking about health care, social care and long-term care, both in a community setting and from an institutional perspective, and they need to write pension legislation. They must do so in a sustainable way and in a much faster time frame.

Is part of the challenge of global ageing due to the fact that we are living longer and healthier lives?

We know that life expectancy is rising, but that is largely driven by the fact that more people are surviving early childhood, avoiding child and maternal deaths,
which means they are living to the age that they could be expected to reach if it wasn’t for those occurrences. But whether that life expectancy, at the boundaries, is actually increasing—particularly in low-income countries—is a different question. In wealthy nations, it probably is and may now actually be the main driver of greater longevity; in other parts of the world, however, it is just that more people are living the lives they are expected to live.

Whether or not we are living healthier lives is more difficult to answer. There is some evidence that severe disability is less prevalent than it used to be at the same age. There is, however, much less evidence to suggest that the more subtle forms of limitations are less prevalent than they were. So yes, we can say that people are living longer lives, but whether they are living longer and healthier, we do not know.

How can governments design sustainable systems to address the needs of ageing populations?

Much of the debate in developed nations is built on the assumption that the systems we currently have are not financially sustainable. My greater concern is that these systems should be appropriate, and enable older people to do the things that are important to them and that will ultimately contribute to society. I think that’s a more important question, but, at the moment, most of the debate is on the economics.

A lot of the concern for financing is actually misplaced. The evidence regarding health care, for example, is that, while ageing will put pressure on costs, it’s actually much less of an influence compared to other factors, such as increasing technology or economic growth. And, when we look at the overall impact on GDP—the changes that have occurred in Asia, for example, over the last 20–25 years—ageing is far less than one might expect.

So, beyond building sustainable systems, we have to make sure those systems are effective and focused. Often we don’t pay enough attention to that because we are not sure what it is we are trying to encourage. This is the reason why, at the WHO, one of the things we are grappling with at the moment is determining exactly what “healthy ageing” means, since health is one of the key attributes that will allow people to experience well-being and contribute to society.

In the past, we’ve often considered health simply to be the absence of disease. Now we’re really trying to see it as how to maximise the functional ability of older people. If we think in this broader sense of “functional ability”, we will be able to deliver more integrated and cost-effective care and treatment.
People who enjoy good health in old age face the challenge of financing their retirement, while those in poor health face costs that must often be supported by their families and society. How can we better manage these age-related costs?

One of the hallmarks of older age is increasing diversity—you see a much greater span of health states in old people than you do at younger ages—and that diversity is not by chance. It is very closely linked to the experiences that the person has had over their lifetime and driven by factors such as their social situation. There is therefore the potential for that diversity to be inherently inequitable. Therefore as a preface to your question, I’d like to point out that the distribution of healthy ageing versus unhealthy ageing is not random, with the latter often affecting people born into a lower social station with less education and fewer opportunities.

It is important to address this inequality and ensure that there is not a generational transfer of inequity. For example, if someone cannot afford long-term care, a family member may have to quit work to take care of them, passing on the poverty to the next generation.

This is where we really need to look at the balance between individual, family and government responsibility—and I don’t think that debate has been adequately framed. It’s interesting to note that, in emerging countries, we often hear that “the family takes care of the elderly”. This is generally code for “women”, a situation that does not take into account the changing role of women in society and their aspirations. Neither does it take into account the increasing number of elderly—it is simply not sustainable.

China has recognised this, writing into law that care of the elderly is a shared responsibility between family and government.

In wealthier nations, the debate often focuses on how much share should go to family and how much to government. But what we need to be looking at is the degree to which families can provide that long-term care and the impact it can have, rather than deciding the proportion of responsibility that falls on government based on age.

What role can insurance play in helping to address the challenge of age- and health-related costs?

Certainly insurance has a role to play and it’s important not to let the perfect be the enemy of the good: having access to insurance, even if it is only for a small portion of the population, is better than none at all. We must, however, ask ourselves the question: insurance for what? Even for long-term care insurance, for instance, we must determine what coverage is intended.
GLOBAL AGEING

In essence, we need first to define the services that need to be provided, and ensure that these services are integrated and cohesive. Then we can determine on the one hand how insurance can contribute, on the other how government can complement for the lower-income population.

In various countries in the world there are mandatory long-term care insurance schemes, and some are struggling with sustainability. It’s interesting to note that often they fund different things—and what is funded affects sustainability. In some countries, the scheme will only cover services, while in others they provide cash payments to the families: generally you don’t take the service, but you do take the cash! Therefore the role of insurance must include a debate on what is covered as much as how to cover it.
SUMMARY OF THE GENEVA ASSOCIATION’S 11TH HEALTH AND AGEING CONFERENCE ON “EMERGING HEALTH RISKS AND INSURANCE”

On 6–7 November 2014, the 11th Health and Ageing conference of The Geneva Association on “Emerging Health Risks and Insurance” took place in Madrid, Spain, hosted by MAPFRE Foundation. The audience comprised more than 50 participants of about 25 different (re)insurance companies, national insurance federations and academics originating from Europe, North America and Asia.

The changing global risk environment has led to the appearance of new risks in the context of health, including behavioural risk, big data, pandemics and environmental health risks. For all these risks, it is very likely that insurance will have an increasingly important role to play in helping society to adapt and become more resilient. The aim of this conference was to understand better the nature of these new, emerging health risks and to discuss how they impact health and health financing mechanisms, as well as how insurance manages these risks.

The conference proved to be effective not only by raising awareness and by offering the insurance industry knowledge and solutions on how to best manage these health risks, but also by acting as an international forum for discussion amongst concerned parties, one of the main goals of the conferences organised by The Geneva Association.

This short text summarises the key insights that could be extracted from the conference in relation to four emerging health risks.

**Behavioural risks**

Behavioural risk factors, chief among them smoking, heavy drinking, poor nutrition, lack of exercise, are known causes of cancer, diabetes, lung disease and cardiovascular diseases, which in turn drive health-care expenditures, disability and mortality.

Insurers can develop various strategies to address these behavioural factors, ranging from risk-based pricing to using better analytics via new models and big data, which make it possible to develop continuous underwriting and predictive underwriting.

Insurers can also modify behavioural risk factors through wellness programmes that encourage healthy diets or increase physical activity. These programmes have been the fastest growing areas among employer benefits in the U.S. for several years, and health insurers in other countries are developing similar programmes.

Wellness programmes offer exclusive rewards to motivate healthy engagements, such as free cinema tickets, cash back on holidays or rebates on spas. Engagements in wellness programmes have shown a decrease in claims for health insurance and life insurance, and a positive impact on sickness absence and employee performance and retention. The question is how such wellness programmes should be structured within an insurance contract to be efficient in the long term and to engage the higher risk population in healthier behaviours.

**Big data**

Health is going more and more digital. In the U.S., for instance, 70 per cent of clinical data are electronically managed. Big data contributes to medical innovation with the internet by combining health apps, electronic medical records, genome data and public databases. Big data has the potential to change the insurance business.

For example, wearable tech devices make it possible to monitor blood pressure, calorie consumption, sleep cycles, etc. instantaneously, allowing for better personal health behaviour, improved medical diagnosis, and emergency action. Also, the use of social media to collect health-related data allows a better understanding of how individuals
manage their disease and treatment. It is then possible to map chronic disease, thereby improving the information on chronic disease trends in locations for which company historical data are scarce.

Big data can therefore create many opportunities by providing information applicable to underwriting, claims management, product development, pricing and distribution. This can also lead to insurance policies that are more personalised and more specific to the individual risk profiles and not governed by risk pooling.

On the negative side, big data can create higher adverse selection, as consumers will know their health profile better, while insurers may not be able to use health data due to data protection legislation and anti-discrimination laws.

With the proliferation of data, barriers to entry into insurance are changing, and the crucial question is who amongst insurers, retailers, big pharma, or social media companies will offer the new business models.

**Pandemics**

The ongoing Ebola crisis reminds us of the high vulnerability of societies and economies to pandemic risks. However, Ebola is much less contagious than other viruses such as influenza, which could lead to devastating pandemics.

Pandemics represent one of the most important tail risks both for life and non-life insurers, with potential consequences on many insurance lines of business such as life and health, business interruption, liability and property loss. Impacts are also likely on capital markets and on the investments made by insurers.

The ability of societies to cope with pandemics depends both on the health-care system in place and its level of preparedness, as well as the availability of knowledge from various fields of expertise ranging from virologists and biologists to epidemiologists.

The insurance industry also has an important role to play in managing this risk both through risk modelling and risk financing, as well as by contributing to improving health system preparedness. The insurance industry can thus expand its social and economic role as a tool for individuals, institutions and governments to mitigate the impact of a major pandemic.

**Environmental health risks**

Environmental health risks broadly concern air quality, water quality, toxic substances and climate change. Environmental health risks negatively affect individual health leading to various diseases. For instance, air pollution leads to stroke, heart disease, lung cancer and asthma. Bad quality water is responsible for malaria or other water-related vector illnesses. Toxic substances lead to reproductive disorders, immune system and endocrine disruption, and impaired nervous system function.

While these health risks have many consequences on claims for health and life insurers, they can also offer potential business opportunities in terms of products, underwriting and pricing.

Examples of new products could be specific coverage for asthma; term life insurance with specific riders linked to cancer; enhanced annuities for clients in heavily polluted cities; or group policies with pricing factors, such as distance of the companies from public transportation, number of cars in the company’s fleet or whether there is internal quality monitoring.

Other insurance products could include an annuity payment to cover daily treatment expenses due to intoxication or micro-insurance cover through payment of the daily salary in case the insured is not able to go to work due to water-related diseases (e.g. diarrhoea).

Environmental health also provides insurers with opportunities to develop philanthropy actions, such as disease prevention by providing specific supports (e.g. masks for preventing asthma or water filters for preventing water intoxication), or increased awareness through education.
The Geneva Papers dedicated its October 2014 issue to the specific topic of health, co-edited by Thomas Buchmueller, Professor of Risk Management and Insurance at the University of Michigan, and Christophe Courbage, Research Director on Health and Ageing at The Geneva Association. This special issue of The Geneva Papers on health continues the series of biennial special issues started exactly 15 years ago. The idea of these special issues is to provide a rigorous forum for researchers to understand better the role of insurance mechanisms in financing health risks, with special emphasis on an ageing population.

The October 2014 special issue contributes to this understanding and concentrates on four topics that are dear to The Geneva Association research programme on health and ageing. These are the phenomena of asymmetric information in markets for health and long-term care (LTC) insurance, the financing of care for an ageing population, the characteristics and determinants of the demand for health insurance, and the impact of health insurance on health expenditures and drug prices. In the following, we briefly summarise the findings from the articles in the special issue regarding the phenomena of asymmetric information in insurance markets.

While adverse selection (the tendency of individuals who are at higher risk to buy more insurance) and moral hazard (those having insurance tend to reduce prevention) explain a positive relation between risk and insurance, a negative relationship between risk and insurance can also be observed in many circumstances. One explanation for this relation is the phenomenon of advantageous selection, according to which more risk-adverse individuals would both engage themselves more in preventive activities and also buy more insurance. Hence, those at lower risk buy more insurance. Evidence published in the special issue shows that indeed the presence of asymmetric information has the potential to impact the development of LTC insurance markets.

One contribution shows that there are sources of both adverse and advantageous selection in the German private LTC insurance market, and that the sources of adverse selection have a dominant impact over those of advantageous selection. These results support the conventional claim that asymmetric information distorts market efficiency and results in a lack of insurance demand, at least in the German private LTC insurance market.

Evidence from this special issue also shows that, in China, having LTC insurance could undermine the incentive for children to provide informal care, which could deter the parent from purchasing LTC insurance. This phenomenon is known as bilateral intra-family moral hazard and is thought to be one of the most important reasons for the sluggish development of private LTC insurance. These findings have important implications both for insurance companies planning to develop LTC products and for Chinese public policy concerning the financing of LTC for an ageing population.
The liaison office for Japan and East Asia run by Katsuo Matsushita was established in October 2009. Its role is to promote and increase recognition of The Geneva Association in the region by developing new relationships with insurance companies, stakeholders and the media. It also assists The Geneva Association in increasing its regional focus, notably by strengthening ties with Members’ companies.

**Economic challenges in East Asia in 2015**

According to the International Monetary Fund (IMF) revised forecast, the world economy is likely to grow 3.5 per cent at purchasing power parity, with the economies of the Asian region growing at the fastest rate, a trend set to continue for decades; the economies of the Association of Southeast Asian Nations (ASEAN) will grow by 5 per cent. While, in most ASEAN member countries (except Malaysia), lower oil prices are having a favourable impact on the respective economies, slower GDP growth in China will affect ASEAN exports, especially commodities from Indonesia, the largest country in the region.

Having learned lessons from the Asian financial crisis of the late 1990s, nations in the region have been building foreign currency reserves to make their overall economic and financial systems resilient against emergencies. That said, once the U.S. Federal Reserve raises interest rates, the bulk of that capital will swiftly flow towards the U.S. and other wealthy nations.

The degree of impact this will have on capital markets and economies may differ from nation to nation depending on each country’s current account surplus. Countries like Indonesia, which has a current account deficit and large trading volume by foreign investors in its equity market, will be most affected.

Other challenges in Asia remain, especially in the ASEAN region, except for advanced nations like Singapore. These include the need for investment in infrastructure in areas such as transportation and utilities. Indeed, efficient logistics and smooth customs clearance are key factors for the success of the ASEAN Economic Community (AEC), which plans to be integrated by the end of 2015. Furthermore, traffic jams in major cities have been hindering the productivity of the service sector and causing air pollution.

Asia has been attracting foreign direct investments; this trend is expected to continue. Recently, not only Japanese, Chinese, Korean and Taiwanese companies but also ASEAN companies (insurers’ customers) have been active in expanding direct investment beyond national borders or even regional borders in search of, inter alia, new markets, new technology and brands. Such internationally diversified investments and operations will enhance the level of risk management.
of supply chains and will bring a trickle-down effect to other companies in the region. International insurers are expected to have opportunities to help these customers by providing highly advanced loss prevention and business continuity management (BCM) know-how.

**Insurance market and challenges**

Major risks facing households, business entities, governments and insurance companies include extreme events and natural catastrophes (nat cats), cyberattacks (breach of information privacy) and longevity risks. In Asia, people are moving to large coastal cities, and investments in property are concentrated there. This will inevitably result in the accumulation of huge risks in vulnerable locations. Addressing nat cats is therefore serious and urgent.

As clearly analysed in the Geneva Association report *The Global Insurance Protection Gap* published in November 2014, narrowing the gap between the current situation and the full potential of the insurance industry in serving societies and economies is a serious issue for all insurers and governments. As for nat cats, establishing an insurance framework with a government backstop (public–private partnerships or PPPs) will be effective for coping with low-probability and high-severity events. In particular, PPPs will be viable in countries or regions where the insurance market is not adequately developed and market capacity is much smaller than the anticipated size of exposure covered. In participating in such a framework, international insurers should emphasise the importance of planting risk-based pricing as the backbone of PPPs. Policyholders’ incentive to risk management or loss prevention will help make PPPs a sustainable scheme. Japan, Korea, Hong Kong and Taiwan are fast becoming ageing societies. Other parts of Asia will also eventually face the turning point of their “demographic bonus period”. The pace of growth of the number of working-age people will become lower than the growth pace of the total population, which will result in more pressure on the government’s welfare expenditure in terms of pension and medical costs. At conferences and seminars, Asian regulators often tend to mention that in the future, governments may no longer be able to fund this kind of expenditure either for nat cats or medical insurance or pensions, and will encourage insurance companies to take risks actively. The reaction of some local Asian insurance companies is not necessarily enthusiastic. This is because: (1) the current level of their capital would become insufficient if additional large risks were underwritten, and (2) they feel a lack of consistency in messages.
from regulators. At the International Association of Insurance Supervisors (IAIS) and the Financial Stability Board (FSB), the buzzword is “international capital standard” (ICS).

Another challenge is the gap between growing long-term insurance liability, i.e. by writing life insurance, and the limited availability of long-maturity bonds within the capital markets of several countries. The current situation will generate stress upon the asset and liability management of insurers and increase capital charges. Regulators and insurers will jointly advocate this issue to a higher level of policymakers in order to develop bond markets.

**Major emerging markets**

**China**

In China, regulators have been taking major steps towards a solvency framework. The China Risk-Oriented Solvency System (C-ROSS) is expected to be fully implemented in 2016, after a transitional period in 2015. With the continuous growth of premium income, the non-life sector plans to raise additional capital. Such financing under C-ROSS may enhance the development of risk models.

The China Insurance Regulatory Commission (CIRC) announced a comprehensive timetable for establishing a system for catastrophe insurance with a three-phase plan to develop the insurance scheme targeting completion by the year 2020.

**ASEAN**

In ASEAN, the AEC is being created in 2015. It is quite logical to establish the AEC as a means of activating intra-ASEAN investment, trade and the movement of human resources in order to make the region’s economy resilient to the economic and social uncertainty or turbulence that may emerge in other regions. Insurance services must play a vital role in facilitating economic integration, particularly in terms of supporting region-wide logistics.

An ideal final phase of an integrated economic region would accommodate a self-financing capital market. But, as far as insurance capacity goes, this is a pipe dream because risk underwriting always needs risk transfer and risk diversification through reinsurance or some other method. This is an essential element of prudential management and prudential regulation.

In this sense, industry actors were puzzled by the recent announcement by the regulator in an ASEAN member country to limit cessions to the international market, obliging insurers to cede to local reinsurers. This is another example of regulatory inconsistency. Accumulating risk within a border seems contrary to the prudence of risk spreading and to the nationwide management of risk.
Way forward

While insurers tend to keep focus on significant international regulatory dynamics, the concern and requirements of customers are of primary importance in an era of rapid technological change. For example, insurers should closely monitor the evolution of corporate customers in terms, for example, of the new technology that they invent and apply to their design, manufacturing or marketing processes, as well as their strategies with regard to international investment. Through these processes they will be able to recognise new threats or risks and to innovate in the area of risk management and business continuity management (BCM). By focusing on their evolution, the insurance industry will be able to develop new products and services, and remain relevant in an ever-changing society and economy.

In these contexts, The Geneva Association Members’ companies are expected to be a beacon for the insurance industry in Asia.
EVENTS

2nd International Colloquium on International Capital Standards
20 February 2015, Basel
This invitation-only event for representatives of The Geneva Association Members’ companies, top insurance regulators and supervisors, and insurance trade associations, provided an interactive dialogue about the design features of the global insurance capital standards (ICS). Topics included possible validation approaches to underpin the ICS, capital resources, and capital requirements.

31st Regulation and Supervision (PROGRES) Seminar
19 February 2015, Basel
This landmark seminar of The Geneva Association focused this year on the early experiences with enhanced supervision and regulation, and the remaining challenges. Topics included the supervision of global systemically important financial institutions (G-SIFIs); crisis management, and recovery and resolution plans; the global insurance capital standard (status quo and next steps); and consumer protection and market conduct.
Consult the conference papers on our website.

10th Chief Risk Officer (CRO) Assembly
18–19 November 2014, Munich
This annual event is open to CROs from all insurance companies and related sectors. The 10th edition focused on changes in the global environment and emerging risks, risks and opportunities for the insurance industry, managing risk in an unstable world, learning from the past to manage the risks of the future, and the future of the insurance business and the future role of risk management.

11th Health and Ageing Conference: Emerging Health Risks and Insurance
6–7 November 2014, Madrid
The 11th Health and Ageing Conference, hosted by MAPFRE Foundation, focused on new and emerging health risks, how they impact health and health-financing mechanisms, and how insurance covers and manages these risks. Topics included behavioural health risks and prevention of non-communicable diseases; environmental health and climate risk; new health technology (including nanotechnologies, big data and smart analytics) and genetics; pandemics and antimicrobial resistance; and the financing and insurability of new and emerging health risks.
See page 33 for a review of this conference and consult the conference papers on our website.
10th Insurance and Finance Seminar: Today’s Issues and Opportunities
4 November 2014, London

Hosted by Prudential plc, this seminar was the tenth of a series of annual meetings linked to The Geneva Association’s Financial Directors’ Network. The event brought together selected financial executives from the international insurance sector and executives from the wider financial community and governments with a close interest in insurance. The aim of the seminar is to facilitate an exchange of views and experiences on a number of policy issues of current relevance.

See page 19 for a review of this conference and consult the conference papers on our website.

6th Extreme Events and Climate Risk (EE+CR) Seminar
Cities under siege—Extreme events, resilience and the role of insurance
23–24 October 2014, New York

Traditionally known as the Climate Risk and Insurance Seminar (CR+i), this sixth edition was organised in collaboration with XL Group and focused on “Cities under Siege—Extreme events, resilience and the role of insurance”. Topics included lessons learned and outlook on extreme events, the vision behind the Hyogo Framework for Action 2 conference, building urban resilience, why cities are especially affected by climate change, promoting resilience to U.S. flood risk with a sustainable insurance marketplace, and the value of pre-event risk reduction and preparedness.

See page 25 for a review of this conference and consult the conference papers and view video interviews with panellists.

41st Seminar of the European Group of Risk and Insurance Economists
15–17 September 2014, St Gallen

The 2014 European Group of Risk and Insurance Economists (EGRIE) Seminar touched upon a wide range of issues, including loss control conflicts, low interest rates and their effects on life insurers, moral hazard and adverse selection, correlation aversion, investments, regulation, pricing insurance, risk measures, ambiguity and flood insurance. On the occasion of the 41st EGRIE Seminar, Prof. Harris Schlesinger, University of Alabama, delivered the 26th Geneva Risk Economics Lecture.

Consult the conference papers on our website.
12th Annual Round Table of Chief Risk Officers
5–6 June 2014, Paris

In 2002, The Geneva Association created within its programme on Risk Management an Annual Round Table of Chief Risk Officers, or ART of CROs. Its objective is to provide the CROs of Members’ companies with a platform to discuss the roles, objectives and tasks of CROs, and to create a network to exchange experiences and discuss specific risk problems. By invitation only, the meetings offer the researchers of The Geneva Association the opportunity to discuss their research activities with the risk specialists of Members’ companies, and to identify and prioritise themes and issues of interest to The Geneva Association’s Members. In 2014, the 12th ART of CROs was jointly organised by The Geneva Association and SCOR.

8th Meeting of Chief Investment Officers
4 June 2014, Zurich

The 8th Meeting of Chief Investment Officers was generously hosted by Dr Guido Furer, Group CIO of Swiss Re at Swiss Re’s Center for Global Dialogue in Rueschlikon. This year’s meeting covered a range of issues including long-term investment, notably infrastructure investment; financial repression and cost-benefit analysis; new capital rules; and a discussion on investment outlook.
41st General Assembly
14–17 May 2014, Toronto

The General Assembly of The Geneva Association is the most prestigious gathering of insurance executives in the industry calendar and has been an annual event since The Geneva Association’s founding by a group of insurance chief executives and luminaries including former French prime minister Professor Raymond Barre, in 1973. It allows Members to exchange their ideas and discuss key strategic issues that are major opportunities or challenges for the sector and to prioritise long-term strategic issues.

The emphasis of the 41st General Assembly was on the macro-economic environment, with a focus on capital standards and efficient regulation, disaster risk reduction and resilience, infrastructure investment, and the issue of underinsurance.

The year’s keynote speeches were given by Mark Carney, Governor of the Bank of England and Chairman of the FSB; Al Gore, former Vice President of the U.S. and Chairman of Generation Investment Management; Bertrand Badré, Managing Director and World Bank Group CFO; and V. Prem Watsa, Chairman and CEO, Fairfax Financial Holdings Ltd.

The 41st General Assembly was generously hosted by our Canadian Members Charles Brindamour, CEO, Intact Financial Corporation; Dean Connor, President and CEO, Sun Life Financial Inc.; Donald A. Guloien, President and CEO, Manulife Financial Corporation and V. Prem Watsa, Chairman & CEO, Fairfax Financial Holdings Ltd.

The General Assembly Review 2014 provides a retrospective of the General Assembly, with synopses of keynote speeches and essays by CEOs and staff of The Geneva Association.
PRIZES, AWARDS AND GRANTS

ERNST MEYER PRIZE
The Geneva Association annually awards the prestigious Ernst Meyer Prize (CHF 5,000) for university research work—usually in the form of a doctoral thesis—that makes a significant and original contribution to the study of risk and insurance economics. The 2013 judging committee comprised Andreas Richter, Sandrine Spaeter and Richard Watt.

The 2013 Ernst Meyer Prize awarded in 2014 went to Richard Peter for his Ludwig Maximilian University of Munich PhD dissertation entitled “Essays on Selected Problems in Risk Classification and Risk Reduction”. See the article from the Insurance Economics Newsletter No. 70 for a full summary of Richard Peter’s winning contribution.

GENEVA ASSOCIATION/IIS RESEARCH PARTNERSHIP—SHIN RESEARCH EXCELLENCE AWARD
The Shin Research Excellence Award is designed to foster original, practically oriented, applied research in the insurance area addressing issues of concern to global insurance leaders by examining subjects which directly influence business operations and operational business issues on a practical level.

The two winning papers in 2014 were:

For abstracts, please see the article from the Insurance Economics Newsletter No. 70. Each paper won USD 5,000, and the authors were invited to present their work during the International Insurance Society’s 50th Annual Seminar in London, 22–25 June 2014, where their research was presented before the more than 500 insurance leaders attending the seminar. The papers were also published in The Geneva Papers on Risk and Insurance—Issues and Practice Vol. 40(1) in January 2015 (see Publications page 48 of this report).
Shin Research Excellence Award

From left: Michael J. Morrissey, President and Chief Executive Officer, International Insurance Society; Martin Eling, Professor, Institute of Insurance Economics at the University of St. Gallen; Christian Biener, Project Manager and Research Assistant, Institute of Insurance Economics at the University of St. Gallen; Dr. Chang-Jae Shin, Chairman and Chief Executive Officer, Kyobo Life Insurance Company; and Shaun Wang, Head of Research, The Geneva Association.

SCOR–EGRIE BEST PAPER AWARDS

SCOR–EGRIE Young Economist Best Paper Award

The SCOR–EGRIE Young Economist Best Paper Award was created jointly by SCOR, the Institut d’Economie Industrielle (IDEI) and the University of Paris-Dauphine to honour the best paper presented by a young economist at EGRIE’s annual seminar.

The amount offered to the laureate of the award is EUR 2,000. The competition is organised under the supervision of the “Risk Markets and Value Creation” chair at IDEI and the University of Paris-Dauphine, which is sponsored by SCOR and the Fondation du Risque.

The selection committee is composed of five people representing the following institutions: EGRIE, SCOR, Fondation du Risque, University of Paris-Dauphine and IDEI.

The 2014 SCOR/EGRIE Award for the best paper presented by a young economist at the 2014 annual EGRIE Seminar was awarded to Nadine Gatzert, Sebastian Pokutta and Nikolai Vogl for their paper “Convergence of Capital and Insurance Markets:...
PRIZES, AWARDS AND GRANTS

Consistent Pricing of Indexed-Linked Catastrophic Loss Instruments”.

**SCOR–Geneva Risk and Insurance Review Best Paper Award**

SCOR, the Institut d’Economie Industrielle (IDEI) and the University of Paris-Dauphine created the SCOR-GRiR Award to distinguish the best paper of the year published in The Geneva Risk and Insurance Review.

The amount offered to the laureate of the award is EUR 1,000. The competition is organised under the supervision of the “Risk Markets and Value Creation” chair at IDEI and University of Paris-Dauphine, which is sponsored by SCOR and the Fondation du Risque.

The selection committee, composed of the editors and associate editors of The Geneva Risk and Insurance Review, choose and reward the best paper published the previous year.


**RESEARCH GRANTS AND SUBSIDIES FOR THESES**

Each year, The Geneva Association also awards up to two research grants for submissions—usually doctoral theses carried out in the field of risk and insurance economics.

Each grant is worth CHF 10,000 and past topics awarded include: climate change and public health, non-parametric testing for asymmetric information, the impact of demand conditions and technological change on the structural evolution of the insurance industry, and adverse selection and moral hazard in agricultural insurance contracts.

Subsidies of up to CHF 3,000 are also granted to authors of university theses on risk and insurance economics to help defray printing costs and to support the publication of high-quality work.
During 2014/15, The Geneva Association’s publications took different forms in addressing its various audiences:

- six different newsletters;
- conference papers presenting the proceedings, presentations, special reports and research done by The Geneva Association in the context of an event; and
- special reports, presentations and white papers on major themes discussed in the course of the year, written by The Geneva Association staff and/or external collaborators.

**JOURNALS**

Founded in January 1976 under the auspices of the first President of The Geneva Association, Prof. Raymond Barre, *The Geneva Papers on Risk and Insurance* was separated into two series in 1990:

- *The Geneva Papers on Risk and Insurance—Issues and Practice*

As stated by Prof. Barre, the goals of *The Geneva Papers on Risk and Insurance* were, first and foremost, to become the voice of insurance at the highest global level to help elaborate and confront key strategic issues for the sector; and second, to stimulate a constructive dialogue between insurance and its social and economic partners.

Both journals are peer-reviewed and published by Palgrave Macmillan. Articles older than three years are publicly available in the resource centre of The Geneva Association website.

Online access to both journals provides users with advance online publication (AOP)—definitive, citable versions of papers (complete with digital object identifier, or DOI) available online ahead of print.

*The Geneva Papers on Risk and Insurance—Issues and Practice*

*The Geneva Papers on Risk and Insurance—Issues and Practice* quarterly publishes papers aimed at improving the scientific knowledge of the insurance industry. The editor-in-chief, Dr Christophe Courbage, Research Director, Health and Ageing—Insurance Economics, at The Geneva Association, assisted by the editorial board,
assesses the quality of submissions, determines their potential contribution to the industry, and organises the peer-review process.

The publication is essential reading for academics and researchers in insurance, insurance industry executives, and other professionals who are searching for deeper insight into the strategic options for their sector. It bridges the gap between these groups, highlighting overlapping areas of interest and providing mutually beneficial research and dialogue.

*The Geneva Papers on Risk and Insurance—Issues and Practice* displays healthy growth with a 2013 impact factor of 0.677—the highest in its history—according to the latest edition of the Thomson Reuters Journal Citation Reports®.

Issues published since April 2014:

- **Volume 39, Issue 2** (April 2014): Special Issue on Microinsurance with guest editor David M. Dror;
- **Volume 39, Issue 3** (July 2014): includes articles on Solvency II, systemic risk in insurance and a special issue section on insurance law and economics with guest editors Michael Faure and Miquel Martín-Casals;
- **Volume 39, Issue 4** (October 2014): Special Issue on Health, edited by Thomas Buchmueller and Christophe Courbage;

*The Geneva Risk and Insurance Review*

*The Geneva Risk and Insurance Review* targets academics and university scholars in economics. The Review is published by Palgrave Macmillan in annual volumes of two issues. Its purpose is to support and encourage research in the economics of risk, uncertainty, insurance and related institutions, by providing a forum for the scholarly exchange of findings and opinions.


*The Geneva Risk and Insurance Review* is also the official journal of the European Group of Risk and Insurance Economists (EGRIE).
Issues published since April 2014:

- **Volume 39, Issue 2** (September 2014), a special issue on new developments in the economics of insurance markets with adverse selection;
- **Volume 40, Issue 1, Celebrating 40 Years** (March 2015).

**NEWSLETTERS**

Since early 2013, The Geneva Association’s newsletters have been disseminated almost exclusively in electronic format.

**Insurance and Finance**

The research programme on insurance and finance comprises academic and professional research activities in the fields of finance where they are relevant to the insurance and risk management sector.

**Regulation and Supervision**

The aim of this newsletter is to contribute to the exchange of information on studies and initiatives aimed at better understanding the challenges arising in the fields of insurance regulation and supervision, as well as other legal aspects.

**Risk Management**

This publication summarises The Geneva Association’s initiatives in the field. It is open to contributions from any institution or company wishing to exchange information on the subject.

**Health and Ageing**

This publication seeks to bring together facts and figures linked to issues in health, and to explore solutions for the future financing of health. It also highlights the role that insurance solutions can play in it.

**Insurance Economics**

This newsletter for risk and insurance economists serves as an information and liaison bulletin to promote contacts between economists at universities and in insurance and financial services companies with an interest in risk and insurance economics.

**Life and Pensions**

The *Life and Pensions* newsletter provides information on the programme’s activities and showcases articles on the structuring of social security and retirement systems, as well as the insurance industry’s potential role in addressing the challenge of retirement security.
CONFERENCE PAPERS

The conference papers series of The Geneva Association presents the proceedings, presentations, special reports and research done by The Geneva Association in the context of an event. The proceedings of an event are available on our website on the page dedicated to that event. Please note that a few events are closed to the general public and access to the conference papers may be restricted.

RESEARCH REPORTS, PRESENTATIONS AND WHITE PAPERS

The Geneva Association and IIIF response to the IAIS July 2014 BCR Consultation
August 2014

The Geneva Association and the Institute of International Finance (IIIF) provide a joint response to the IAIS’ July 2014 Basic Capital Requirements Consultation. Comments emphasise the concerns of the G-SIs who are immediately subject to the BCR, but also include input from non-G-SIs.

See Financial Stability page 15 for more details.

The General Assembly Review 2014
September 2014

The Review is a retrospective on some of the key discussions in Toronto at the 41st annual General Assembly of The Geneva Association.

It provides an insight into the most prestigious gathering of insurance leaders worldwide, and comprises essays by CEOs and staff of The Geneva Association, as well as synopses of keynote speeches by former U.S. Vice President Al Gore and Mark Carney, Governor of the Bank of England and Chair of the Financial Stability Board. Subjects include insurance regulation, extreme events and climate risk, the challenge of underinsurance, and long-term investment.

The Global Insurance Protection Gap—Assessment and Recommendations
Edited by Kai-Uwe Schanz and Shaun Wang, November 2014

This report presents an overview assessment of the current state of underinsurance in non-life, life and pensions insurance. It also proposes specific actions by the insurance industry in collaboration with governments that can help close the protection gap and thereby add to their contribution to economic development.
U.S. and Japan Life Insurers Insolvencies Case Studies—Lessons learned from resolutions
Edited by Etti Baranoff, January 2015

The report presents some of The Geneva Association’s investigations over the past few years into insurance insolvency cases from around the world and the most important lessons learned for improving resolution regimes. In this first report, the case studies include three U.S. and eight Japanese life insurance insolvencies. The main objective in examining these cases is to identify the best practices for ensuring smooth, non-disruptive resolutions, with a focus on policyholder protection and the overall stability of financial markets and economies.
The Geneva Association is the leading international think tank for strategically important insurance and risk management issues. Its Members are the CEOs of the world’s leading insurers and reinsurers.