The Geneva Association

Annual Report 2010/2011

The Geneva Association

(The International Association for the Study of Insurance Economics)

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 policy-makers, 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", is based in Geneva, Switzerland and is a non-profit organisation funded by its members.

The Geneva Association

Annual Report 2010/2011

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Chairman's Statement

Nikolaus von Bomhard
Chairman of The Geneva Association,
Chairman of the Board of Management,
Munich Re

The Geneva Association has been focused on the role of insurance in societies and economies for over 37 years and the last year has shown a broad spectrum of the benefits and importance of insurance in economies and societies as well as the challenges that face the industry. Paradoxically, whilst the Atlantic had the most named storms since 2005 and was the joint third most active season alongside 1995 and 1887, none of the hurricanes made landfall in the U.S. Conversely, a series of significant earthquakes and weather-related natural catastrophes caused huge damage and loss of life, most significantly in Haiti, Chile, Australia, Pakistan, New Zealand (twice) and most recently Japan with the latter demonstrating with a tsunami and a consequent nuclear emergency, how sometimes one catastrophe can trigger a chain of further disasters.

The year's events also demonstrated the differences between the economies where risk management and insurance have played their part in mitigating the worst social and economic effects of the disaster, and those areas where their lack has been sorely missed, not least in Haiti.

As individuals and economies become wealthier, insurance has become more relevant than ever—not less, as some economists predicted. And whilst this is most true in the developed world, in the developing world, a focus on risk management and the adoption of insurance mechanisms would also go a long way towards absorbing some of the economic impacts of such an event—as much for the country as the individual. A pool that shares the cost of residential earthquake losses between Japanese insurers and their government has been implemented to deal with the devastation caused by the recent earthquake and tsunami. This mechanism is a good demonstration of the partnerships that can exist between insurance and governments. This is not just restricted to property and casualty claims either—the demographic implications of us all living longer and the rising cost of healthcare are key areas where insurance is the natural private sector counterparty for governments in addressing the financial challenges of these changes.

It is no surprise therefore that these are all areas where the insurance industry's leading think tank, The Geneva Association, has been focusing its efforts over many years. The Association's role is as a form of "radar" for the industry on upcoming issues, challenges and opportunities for the industry and 2010/11 has consequently been an extremely busy year. Last year the developing world climate Statement by The Geneva Association's Risk Management research programme, alongside UNEP-FI, the Munich Climate Insurance Initiative and ClimateWise highlighted the importance of insurance and risk management in the world's efforts to mitigate and adapt to a changing climate. The Statement, aimed at the COP16 negotiators and governments in the developed world, called on governments to pay more attention to the social value of risk management as well as insurance, particularly in the developing world. The Risk Management Research Programme has had a dedicated focus on climate risk and insurance for three years, most recently encompassing the implications of climate and other liabilities on insurers.

The ongoing work of the Health and Ageing and Four Pillars Research Projects bring together the world's leading academics and industry figures on the challenges and the issues raised by the rapidly lengthening life expectancy of the world's population, the increasing costs of health provision and the care of our increasing numbers of elderly as well as the nature of retirement and

Chairman's Statement

its funding. Similarly the Insurance Economics Research Programme saw the second meeting of the five-yearly World Risk and Insurance Economics Congress in Singapore, the most global and largest meeting of top insurance academics, practitioners and government specialists from around the world. All of this work has been instrumental in the development of insurance industry thinking in their respective fields and the work of all these projects, as well as the industry responses to the recent crises mentioned above, have all accentuated the importance of our industry to governments as well as individuals.

Universally necessary for the proper functioning of the insurance industry in developed or developing world economies, is the presence of a strong and high quality regulatory environment in which insurance operations can thrive.

Over the last year therefore, the Insurance and Finance Research Programme and the Programme on Regulation and Supervision (PROGRES) have been fully focused on the regulatory responses to the credit crisis initiated by the G-20. The Association's initial study on systemic risk in insurance (featured in the last annual report) has provided a research-based foundation for understanding the relationship between insurance and financial stability. Over the last 12 months, that work has been augmented and developed through continued in-depth research by The Geneva Association Financial Stability in Insurance Working Groups and through its ongoing dialogue with regulators, principally the IAIS and its members.

The Financial Stability Board is the body charged with developing and implementing the necessary regulation for systemically important financial institutions on the global level and whilst it takes specialist advice from the International Association of Insurance Supervisors (IAIS) in insurance matters, it is itself more expert on banking than insurance matters. Ours is a complex industry, very different to any other and one that has long-term investment and risk management horizons. The industry is working hard through The Geneva Association to assist regulators in their tasks, but only time will tell how well they will listen to this voice.

The interactions with regulators concerning financial stability and systemic risk will no doubt continue for some years but it seems that the next months are likely to be pivotal in the decisions that are made by politicians, with regulators preparing a methodology that will answer the political requirement but not necessarily focus wholly on the role of the industry as an economic stabiliser. The discussions at the upcoming General Assembly in Rio de Janeiro will therefore be extremely important and I look forward to joining members there to discuss these and other challenges facing the industry.

As a think tank for the insurance industry internationally, The Geneva Association constantly evolves to reflect the growth and strength of the insurance industry around the globe. It is with great pleasure therefore that we welcomed Yan Wu, Chairman and President of The People's Insurance Company (Group) of China Ltd. last year. We look forward to the experience, perspective and knowledge that he will bring to the Board.

The variety of issues currently on The Geneva Association's agenda and the pace of regulatory discussions have made this a very busy year. I would like to thank the Board and our members for their support and the staff of The Geneva Association for their diligence and dedication over the last year.

Nikolaus von Bomhard
Chairman of The Geneva Association,
Chairman of the Board of Management,
Munich Re

Secretary General's Statement

Patrick M. Liedtke
Secretary General and Managing Director,
The Geneva Association

The work of The Geneva Association encompasses a wide array of issues, ranging from regulation to risk management, from financial issues to demographics, from old-age security to the theoretical underpinning of insurance and risk transfer mechanisms. Over the past 12 months, two areas have seen especially dynamic evolution and have been at the forefront of our endeavours: 1) financial stability and the new regulatory initiatives triggered by the financial crisis and the desire to identify and better control institutions with systemic character; and, 2) climate risks and extreme events that require a fresh look at how risk transfer mechanisms are organised and which role insurers can play, especially also in partnership with governments.

The direction of international insurance regulation is going to be critical for the industry this year and while much is inspired by financial crisis considerations, the activity level of regulators in general has increased markedly. Major regional projects such as Solvency II, which have gained reference status beyond Europe, and global projects such as International Financial Reporting Standards (IFRS) reforms and several International Association of Insurance Supervisors (IAIS) initiatives will see key decisions still in 2011 and also early 2012. We are working with international regulators and standard-setters to help them tackle the complex questions of how best to regulate and supervise the insurance industry. We provide factual analysis and additional knowledge for their discussions with a view to achieving the most efficient insurance solutions in the future regulatory framework. Getting this next wave of regulation right is critically important, not only for the industry, but also for continued economic growth and development.

Specifically concerning financial stability, the G-20 has tasked the Financial Stability Board (FSB) with addressing and solving the problems surrounding the resilience of the global financial system. While systemic threats do not emanate from core insurance activities, there are a number of issues that remain poorly understood or simply have not been discussed properly, among them the consequences of designating systemic risk status to insurers. The role of insurance companies as stabilisers but also when operating as financial conglomerates carrying out potentially systemically risky activities has to be properly addressed and the confusion surrounding Systemically Important Financial Institution (SIFI) identification needs to be overcome. The Geneva Association is directly involved in these discussions, supporting the work of the FSB and the IAIS through the provision of analytical work and the coordination of input from insurance companies. In the discussions on financial stability, the differences between insurance and banking have to be taken into account appropriately and any solutions need to be compatible with the distinct roles that insurers and banks play in today's economic systems. The key is to ensure that regulatory imprecision or over-stretch do not hamstring a well functioning industry and damage societal interests. It is very unfortunate that political expediency and a desire to find solutions as quickly as possible is not giving enough room and time for insurance expertise and in-depth analysis to be properly projected into the process. The FSB and the IAIS are both under enormous pressure to conflate a problem that chiefly concerns the banking world with insurance, despite the fact that historically no systemic financial crisis has ever been triggered by insurance activities.

The challenges related to climate risks and extreme events are long and far-reaching but

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there are also opportunities. Insurers have deeper and more detailed knowledge about extreme events and climate risks than any other industry. Effective government action and implementation of risk management measures, including insurance, in both the developed and developing world, are critical in protecting societies from mega risks. While government level talks have practically stalled, the challenge of how to deal with threatening scenarios linked to climate risks remains. Few risks transcend borders as readily, put as many lives, livelihoods and values at risk, and require as close a cooperation between public and private partners as these events. We are likely to see increasing evidence of higher climate risks. In addition to providing protection, the insurance industry stands ready to play a more significant role in steering risk management and adaptation measures.

However, we should not forget that a serious demographic challenge lies ahead for most societies. Longer life expectancy and ageing populations have not only a massive and direct impact on the organisation of old-age security and health provision; they also change the way in which societies look at risks, organise their infrastructures and generally deal with economic and other challenges. Current solutions for old-age security are often not sustainable and need wholesale reform; health systems are creaking under the weight of service provisions that are regularly outpaced by the demands placed on them, and so far, societal discussions around the proper safeguarding of long-term interests of changing and diverging populations have been very limited. As the risk industry, insurance can make important contributions to these demanding questions and as the post-crisis environment will again free up more energies to tackle longer-term issues (rather than the financial fire-fighting of late) more of these challenges will come into focus again.

Over the past 12 months, The Geneva Association has taken a major step forward in its aim of increasing the prominence of insurance in global debates, of fostering better understanding of the industry's role, of projecting the voice of the industry into global discussions and of augmenting the outreach in general. The reach of our organisation has greatly increased, with letters to the G-20, more articles, and direct and indirect contributions in the international media, as well as much closer contacts with the relevant stakeholders that are setting the future framework for the insurance industry. We have also started to coordinate our actions more closely with trade associations around the world for specific projects and The Geneva Association work is finding its way more immediately into their direct lobbying efforts. While last year, the acceleration of the media and the communication work was one of the executive priorities, in 2011 we are upgrading our institutional relations, with a new dedicated Director to head this area. Following the Board's decision in February to set up a new structure for outreach work, we moved swiftly. At the beginning of March, Brian Atchinson (formerly Executive Director of IMSA, U.S. Insurance Commissioner, President of NAIC and IAIS Executive Committee Member) took over in an acting capacity. The small department that is being created under his wing is bringing a new orientation to the Association, fully in line with the decisions of the membership about more proactive engagement, especially in worldwide regulatory debates.

The dynamic process of transforming The Geneva Association from an organisation that is chiefly concerned with insurance research and strategic thinking, into one that also proactively influences key debates on the global level is only possible with the full cooperation of our members. The flexibility and responsiveness of the organisation is due not only to its small size, but also to its ability to draw on the considerable resources and expertise of willing members. I would like to thank our members and Board Members under the guidance of our Chairman for their support as well as our staff and everybody else who has contributed intensively over the past year.

Patrick M. Liedtke
Secretary General and Managing Director,
The Geneva Association

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Executive Committee

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Chairman of the Board of Management, Munich Re

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John Strangfeld
Chairman and CEO, Prudential Financial Inc.

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Kunio Ishihara
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3rd VICE CHAIRMAN

Michael Diekmann
Chairman of the Management Board, Allianz SE

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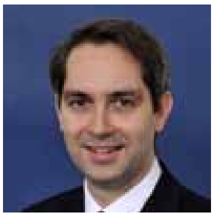
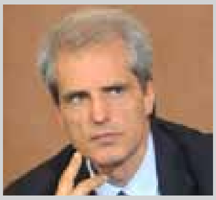
Andrew Moss
Chief Executive, Aviva Plc.



Patrick M. Liedtke
Secretary General and Managing Director, The Geneva Association

Board of Directors
(cont'd)

Carlo Acutis
Vice President,
Vittoria Assicurazioni



Sergio Balbinot
Deputy CEO,
Generali Assicurazioni
S.p.A.

Christine Bosse
CEO,
Tryg
(until 1.2.2011)

Henri de Castries
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Liberty Mutual Insurance
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Donald A. Stewart
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Sun Life Financial Inc.

Tidjane Thiam
Group Chief Executive,
Prudential Plc.

Patrick Thiele
President and CEO,
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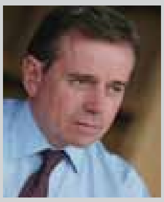


Richard Ward
CEO,
Lloyd's

Yan Wu
Chairman and President,
The People's Insurance
Company (Group) of
China

Key Collaborators

(as of 31 March 2011)

Patrick M. Liedtke
Secretary General and
Managing Director,
The Geneva Association

Walter R. Stahel
Vice Secretary General
Research Director
Risk Management

Jan Monkiewicz
Vice Secretary General
Research Director
PROGRES (Regulation)

Brian Atchinson
Acting Head of
Institutional Relations

Etti Baranoff
Research Director
Insurance and Finance

Christophe Courbage
Research Director
Health & Ageing and
Insurance Economics

Daniel Haefeli
Head of
Insurance and Finance

Anthony Kennaway
Head of Communications

Collaborating Experts (part-time)

John Amore, Deputy of the Board

Julian Arkell, Special Advisor (Global Services Trade and Investment Issues)

Katsuo Matsushita, Liaison Officer for Japan and East Asia

Richard Murray, Special Advisor (Liability Regimes)

Henri Schwamm, Special Advisor (Publications and Local Relations)

Gordon Stuart, Liaison Officer for North America

Brian Woodrow, Director, Applied Services Economic Centre and Director, World Fire Statistics Centre

Hans Peter Würmli, Chairman of the CRO Networks

Staff of The Geneva Association Secretariat (part-time and full-time)

Barbara Botterill, Conference Coordinator

Valérie Hirt, Project Manager, IT Services

Françoise Jaffré, Webmaster

Valéria Kozakova, Production and Distribution Manager

Patricia Linstaedt, PA to Secretary General

Véronique Martinez, Information Manager

Katarzyna Pisarska, Research Assistant, CC+I Project

Samantha Solida, Communications Assistant and Editorial Manager of *The Geneva Papers on Risk and Insurance*

Tribute to the Founder of The Geneva Association

The Century of a Gentleman: Fabio Padoa Schioppa,

Former Chief Executive Officer of Generali, and Founder and Former President (1976–1983) of The Geneva Association*

"You, insurers, you just play with dice". This sentence, from an important Italian politician, must have hurt the young Fabio Padoa. In fact, he started his working career by teaching philosophy for a short while, showing his deep cultural interest in the human endeavours. He then started a long career at the Generali insurance company, reaching the level of "Amministratore Delegato" (Chief Executive Officer), and extending his horizons worldwide and benefitting from being fluent in the major European languages.

He was then not only a recognised top manager and a respected representative in many countries where Generali has operations, but also had the ambition of upgrading perceptions of insurance in business, educational and public circles. Insurance operations had been dismissed for decades (in fact, two centuries) by most economists and were considered secondary to the economy. Many thought (and even still think today) that technological advances in all fields would increase the predictability of events, and therefore make insurance more and more obsolete: even some insurance Chief Executives were convinced of this, and said so openly, as if they were, indeed, simply "playing" with dice. In fact, just the opposite is true: technical and social advances make the management of vulnerabilities an increasingly relevant and even indispensable economic issue and problem. Many cases show that it is the key connotation of the contemporary (service-based) economy.

Fabio Padoa had a clear perception of the growing importance of risk management and insurance in our world, and he started to launch the idea of a centre or institute to study this development. In 1972, like a pilgrim, he went around Europe to discuss this project. His personal reputation, along with the reputation of Generali, which he represented, convinced a number of Chief Executives of major insurance companies (Allianz, UAP now AXA, Prudential, Swiss Re, Zurich, to name but a few) to give this initiative a try.

There were initially just a dozen who inaugurated the "International Association for the Study of Insurance Economics" (soon called "The Geneva Association") in 1973 in Paris. Padoa, with the backing of some founding members, was also able to find a first-class President for this new Association in the person of Raymond Barre, who was then returning from Brussels (where he was Vice President of the European Community)—a man of great reputation, professionalism and honesty in the management of economic research, who subsequently became Prime Minister of France in 1976. His contribution during the first two and a half years as President of The Geneva Association was essential, together with the continuing efforts of Fabio Padoa, to guarantee the credibility of the project.

Fabio Padoa was then elected President of the Association, serving for the next seven years, a period during which the activity and research programme was consolidated. Some episodes illustrate the human quality of his "dedication"—he never received any payment for his efforts, except the reimbursement of travel costs. But even for those, he accumulated those sums and made them available in full to co-finance a book on The Management of Risk and Uncertainty in the Service Economy—The Limits to Certainty (he only said the money was coming from an unknown person, but the amount tallied with the payments). He even once wondered how the salary of a Chief Executive in his company could be evaluated as compared to the lower salaries: could it really be 10 or 20 times more?

Membership to The Geneva Association was then extended to almost all significant insurance companies in Europe (always represented by their Chief Executives, all of whom were, and remain today, members on a personal basis). It then also started including American insurers, which now extend to all the five continents and a total of up to 90 members (a statutory limitation).

As he himself declared on several occasions, Fabio Padoa was, and is, quite proud of his initiative, proving that his perception of the growing importance of the economic role of insurance was well founded, and underlining the fact that great business leaders—on the basis of their practical experience—can also provide a vision that goes beyond their sector of activity, which after all is also conditioned by the larger overall environment, an environment in which risk management and insurance economics are today more and more important.

Fabio Padoa has now reached 100 years of age (on 7 January 2011) and The Geneva Association will soon be 40 years old—a success story for a great personality, whose creativity and vision created The Geneva Association and without whom it would never have existed. He deserves the highest honours and gratitude.

Dear Fabio Padoa, thank you for your initiative and your example.

Orio Giarini, Former Secretary General of The Geneva Association (1973–2000).

* *The Geneva Papers on Risk and Insurance* (2011) 36, 1–2

Insurance and Finance

“ …academic and professional research activities in the fields of finance where they are relevant to the insurance and risk management sector”

Daniel Haefeli
Head, Insurance and Finance

Etti Baranoff
Research Director, Insurance and Finance

Insurance and Finance

The year 2010/2011 was characterised by continuing the major contribution of the Insurance and Finance Programme of The Geneva Association to international regulatory bodies on issues of financial stability in insurance. Key to the contribution have been methodologies that reflect the many and fundamental differences between the insurance and banking business models.

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. The programme is dedicated to making an original contribution to the progress of insurance through different initiatives in the field of insurance and finance. Broadly, the research programme engages in:

- highlighting issues of key importance;
- promoting studies of the function of finance in insurance;
- discussing the relevance of financial concepts and instruments to the industry;
- detecting new and promising theoretical developments; and,
- diffusing knowledge and the results of research worldwide.

More specifically, currently the programme engages in:

- highlighting the unique business model of insurance within the financial sector;
- providing research-based assistance to regulators and interested financial sector stakeholders in the area of Financial Stability;
- explaining the importance of the insurance sector to economic growth and stability; and,
- promoting study and research relevant to key financial issues affecting the insurance sector such as low interest rates and impact of regulatory actions.

The Insurance and Finance Programme continued to take a central role in the activities of The Geneva Association in 2010/2011. The highly acclaimed reports *Systemic Risk in Insurance* (March 2010) and *Key Financial Stability Issues in Insurance* (July 2010), set the stage for The Geneva Association to take a leadership role in regulatory initiatives for systemic risk. The work on methodologies for identifying Systemically Important Financial Institutions (SIFIs) and the coordination of efforts have dominated the Insurance and Finance programme almost exclusively throughout the reporting period.

Head, Insurance and Finance, Daniel Haefeli, and Research Director, Etti Baranoff, at the 2011 PROGRES Seminar

In October, The Geneva Association appointed Daniel Haefeli and Etti Baranoff as Head and Research Director of the Insurance and Finance programme respectively. Daniel Haefeli's role is to coordinate the CFO and CIO Networks and manage the Insurance and Finance programme. He is also the lead coordinator of the Financial Stability Steering Committee and Working Group (see page 20). Etti Baranoff focuses on research in the area of systemic risk and edited

Insurance and Finance

the 7th *Insurance and Finance* newsletter which includes an interview with the executive team of New York Life as a first feature success story and a detailed description of the 7th Insurance and Finance Seminar held in London in early December 2010.

The 2010-2011 Insurance and Finance Programme Activities

Following the financial crisis, The Group of Twenty (G-20) Finance Ministers and Central Bank Governors asked the Financial Stability Board (FSB) to develop methodologies to identify financial institutions that: (i) can cause impairment to all or parts of the financial system; and, (ii) have potentially serious negative consequences for the real economy. The FSB included the insurance industry in this mandate and asked the International Association of Insurance Supervisors (IAIS) to develop a process which would aid the FSB in designating SIFIs in insurance.

The Insurance and Finance Programme, with its regulatory interests and interface with the IAIS, alongside the PROGRES research programme, has been deeply involved in these initiatives and has taken an active role in developing studies, presentations and letters to illustrate issues from an academic perspective (see page 23). The most recent examples are:

- assessment of systemic risk indicators in the insurance sector—a presentation during the IAIS Observer Hearing, Basel, 17 February 2011;
- an Orientation Paper for SIFI discussions in Insurance;
- the Industry's Response to IAIS and FSB Project on SIFIs through two presentations before the IAIS Financial Stability Committee in Basel, 7 December 2010 and 17 February 2011;
- three Open Letters to Finance Ministers and Central Bank Governors of the G-20; and,
- an open letter from the International Network of Insurance Associations and The Geneva Association calling for an extension to FSB's regulatory timetable.

These efforts are the culmination of a large amount of analytical work by The Geneva Association to provide relevant and proper tools for regulators in their mission of selecting indicators to identify SIFIs in the insurance sector. The work of the Insurance and Finance Programme was organised into six work streams by the Financial Stability Steering Committee and Working Group:

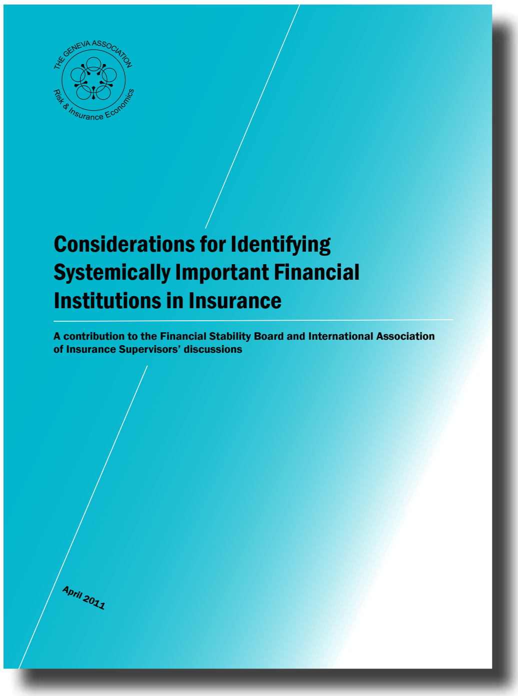
- selection of potentially systemically risky activities (pSRAs);
- measurements of indicators;
- resolvability/resolution;
- translation of risk assessment of indicators into supervisor methodology;
- reputational risk for the industry; and,
- AIG case study.

Based on its recent Financial Stability research, The Geneva Association has consistently articulated a series of key messages for consideration in the regulatory decisions regarding SIFIs in insurance:

- Core insurance activities are not a source of risk to the financial and economic system. Key elements of The Geneva Association findings supported by the global industry are:
  - ○ The business models and roles of insurers and banks in the economy are different:
    - traditional insurance activities have an inverted cycle of production (pre-funding of liabilities);
    - asset liability management is a key characteristic of insurance activities; and,
    - banks are traditionally involved in maturity transformation (borrow short-term to lend long-term), while insurers typically do not take such risks.
  - ○ The insurance sector is stabilising because of its shock-absorbing capacity and its long-term investment horizon.
  - ○ Insurance companies have a proven and sound resolution mechanism that enables

an orderly wind down over time.
  ○ No core insurance activity has ever triggered a systemic financial crisis.
- There are however two potentially systemically risky activities that require further assessment:
  ○ Derivatives speculation/ financial guarantees; and,
  ○ Mismanaging short-term funding.
- In responding to G-20/FSB, it is important that the IAIS develops an adequate methodology with appropriate instruments to:
  ○ directly assess the sources of systemic risk, i.e. activities which could be potentially systemically risky (as per FSB/IAIS criteria); and,
  ○ apply indicators specific to the systemic risk activities to identify potential global SIFIs.
- Our research shows that indicators designed for banks or based on characteristics that are alien to the insurance business are not a viable solution for the identification of insurance SIFIs. Indicators that deal with institutions in a general way (rather than risky activities specifically) are equally inappropriate for insurance.
- The Geneva Association has proposed a comprehensive methodology, containing a set of indicators specifically targeting activities that cause systemic risk, presented at the 17 February 2011 meeting with the IAIS in Basel.[1]

The Insurance and Finance Programme work on Financial Stability in Insurance is ongoing. The Geneva Association has published a new report *Considerations for Identifying Systemically Important Financial Institutions in Insurance—A contribution to the Financial Stability Board and International Association of Insurance Supervisors' discussion*, which includes the research "An Analysis of the AIG Case—Understanding Systemic Risk and its Relation to Insurance" by Etti Baranoff. The report addresses a broader audience including the financial industry, central bankers, governmental bodies and regulators.



Additional Insurance and Finance Programme work streams are currently under way in the areas of:

- interconnectedness;
- resolution;
- timing; and,
- derivatives and hedging.

In this vein, it is the objective of the Insurance and Finance programme to continue creating and providing analysis, research and educational material that will foster productive regulatory discussion and debates regarding:
- definition of thresholds related to indicators finally used for the SIFI designation;
- consequences for potential SIFI designation; and,
- role and responsibilities of Group Supervisors.

1 For further details see: *www.genevaassociation.org/pdf/News/GA_Presentation_IAIS_Hearing_17Feb2011.pdf.*

Insurance and Finance

Highlights of the 7th Insurance and Finance Seminar of The Geneva Association, 2010

A. A Weave of Common Threads

Insurance and Finance Issues and Challenges:

1. The message was clear:
   a. the industry's special position as a provider of stability proved itself during the recent financial crisis;
   b. the insurance business model, when not combined with non-insurance or quasi-banking activities, has shown solidity;
   c. that core insurance activities do not create systemic risks.
2. The forward-looking view:
   a. There needs to be a major educational effort that The Geneva Association can undertake in explaining the insurance business model to all stakeholders in the economy.
   b. There needs to be a strong delineation between "the victims" and "the perpetrators" of the 2007-2009 financial crisis.
3. It was recognised that the insurance industry is in the best position to help governments and society in managing the largest looming societal and economic challenge of longevity risk.
4. Specific current and future activities include: de-risking, dynamics products modifications, global issues, and more.

B. A Quilt of Essential Differences for Success

Insurance Financial Reporting and Regulation Issues and Challenges:

5. Clarity on issues in financial reporting for the group vs. single companies.
6. Non-uniformity in insurance accounting and regulation around the world is a challenging issue. Key questions surrounded two main topics:
   a. convergence towards uniformity;
   b. are accounting rules directing behaviour or responding to behaviour? There was no consistency in the opinions.
7. The issue of interest rates and their use in discounting for reserves, pensions and all insurance products became a recurrent theme in many sessions.

C. Overall Overview

8. Optimism prevailed in the seminar. The presentation by Brian Shea (of Merrill Lynch/Bank of America), "Capstone Presentation: Insurance Industry's Appeal to Investors" provided a positive outlook for investors in the industry.

The Insurance and Finance Programme is seeking to elevate the understanding of the insurance model and its importance to the economy and its stability. The insurance sector plays a crucial role as a stabiliser for the wider economy. Its role was not shaken by the recent crisis. On the contrary, the fact that all policy-holders' claims were paid, proved the resilience of the industry in the face of adversity.

Following are descriptions of three conferences under the auspices of the Insurance and Finance Programme.

The 7th International Insurance and Finance Seminar of The Geneva Association

6-7 December 2010, London

The 7th Insurance and Finance Seminar held in London featured a distinctive structure and opportunities to learn from the top down about the challenges facing the insurance industry. The format of moving from the "big picture" views offered by the CEOs down to the specialised, very detailed technical accounting issues discussed by the financial reporting executives

From left to right: Luke Savage (Director Finance, Risk and Operations, Lloyd's), Philip V. Bancroft (CFO, ACE) and George Quinn (CFO and Executive Board Member, Swiss Re) in discussion at the 7th International Insurance and Finance Seminar.

is most unique. It offers the audience an open and true glimpse into "the core concerns and aspirations" of the industry. It is obvious that there are common and separating themes among the players. Many of these are woven throughout the various panel discussions, but at different levels of detail and perspective.

The message that came clearly out of the seminar was expressed by the Chairman of The Geneva Association and Chairman of the Board of Management, Munich Re, Nikolaus von Bomhard. He called for the following initiative:

> *"Instead of being on the defensive, this industry has a lot to show for and needs to promote itself and be promoted as the one financial industry that managed well through the crisis. It is amazing that instead of receiving accolades and the appropriate appreciation, the industry has to fight an image that was wrongfully imposed on it."*

The Property/Casualty Joint Industry Forum

New York, 11 January 2011

The Property/Casualty Insurance Joint Industry Forum was created to provide leaders from the widest spectrum of the industry with an opportunity to meet with each other in discussion of topics of general interest.

Participants included nearly 250 representatives from property and casualty insurance and reinsurance companies and organisations. The sponsoring organisations of the Forum represented a broad range of insurance interests and audiences. They include: the Insurance Information Institute (organisers), ACORD, the American Insurance Association, the Association of Bermuda Insurers and Reinsurers, The Geneva Association, the Institute for Business & Home Safety, the Insurance Institute for Highway Safety, the International Insurance Society, ISO, the National Association of Mutual Insurance Companies, the National Council on Compensation Insurance, the National Insurance Crime Bureau, the Property Casualty Insurers Association of America, the Property Loss Research Bureau, the Reinsurance Association of America and The Institutes.[2]

[2] Excerpts from "Underwriting Discipline Key, Say Insurance Execs at P/C Joint Industry Forum", *http://www.programbusiness.com/news/Underwriting-Discipline-Key-Say-Insurance-Execs-at-PC-Joint-Industry-Forum*

Insurance and Finance

The theme of the Forum this year was the improved results of the industry since the crisis—"*The property/casualty insurance industry turned a corner and will show a profitable year for 2010, but underwriting discipline will be more important than ever in 2011*", said CEOs participating in the "View from the Inside Looking Out", a panel discussion at the 15th annual Property/Casualty Joint Industry Forum. The CEOs cautioned about the coming year as the differences between calendar year and accident year results are worrisome. Anthony J. Kuczinkski, President and CEO, Munich Reinsurance America, Inc. noted, "*But for release of prior year reserves to help calendar year results, but for a relatively calm cat year, we would have been in a worse position*."

James Wrynn, New York State's Superintendent of Insurance, cited Insurance Information Institute President, Robert Hartwig's observation at a previous presentation on Property/Casualty (P/C) insurer financial performance in 2010, agreeing that "*insurance was on the mend.*" To illustrate P/C insurers' resilience since 2008, Wrynn pointed to a Geneva Association study showing 592 banks, and only three insurance companies, had accessed the U.S. Treasury Department's Troubled Asset Relief Program (TARP). Not one of the three insurers used the TARP monies to bolster their P/C operations, the superintendent noted.[3] The overall picture was optimistic but with cautionary tones.

2010 Italian AXA Forum: Future, Finance, Trust, Facts—Challenges for financial and insurance industry between reality and perception

12 October 2010, Rome

The aim of the Italian AXA forum, formerly the AXA MPS Forum, is to examine "frontier" issues and open debate among key representatives from financial groups, as well as European and Italian institutions about the essential role of insurance and finance institutions in protecting society and dealing with managing medium/long-term risks. As of this year, it is promoted jointly by AXA MPS and AXA Assicurazioni, in partnership with The Geneva Association (co-founder of the Forum) and the Italian National Association of Insurance Companies (ANIA).

The 2010 Forum, which took place on 12 October 2010 in Rome, was very well attended, with around 200 high-level participants. Speakers included, Giuliano Amato, former Prime Minister and Treasury Minister and Senior Advisor to Deutsche Bank; Fabio Cerchiai, Chairman, ANIA; Giuseppe Mussari, Chairman, Monte dei Paschi di Siena Group and Chairman of the ABI; Michaela Koller, General Manager, CEA; and Sandro Salvati, Chairman, ANIA Foundation for Road Safety. There were also presentations of two innovative researches on the relationship between trust and the insurance sector by Monica Fabris, GPF Chairman and Luigi Guiso, Professor, European University Institute and Einaudi Institute for Economics and Finance (EIEF). The Founder of AXA Group, Claude Bébéar, gave a speech on the future of finance, underlining the negative consequences of short-term considerations and giving his vision on overcoming the current economic crisis.

This year's event highlighted future insurance scenarios in the new finance era, focusing on challenges for the financial and insurance industries between reality and perception, and on the key lever of trust within the realm of insurance and banking.

It was clear from the debate that trust in the financial system has reached its historic low in the post-crisis era. Insurance is still not seen as stable and as a major contributor to global welfare, even though the insurance industry did not cause the global crisis, but instead proved to be one of the "healthy" elements in finance, as demonstrated by The Geneva Association's work on financial stability and insurance.

[3] Joint Industry Forum Panel Concludes P/C Insurers Have Proven Resilient During Economic Downturn, 14 January 2011, *http://insurancenewsnet.com/article.aspx?id=243157&type=propertycasualty*

Insurance and Finance

From left to right: Patrick M. Liedtke (Secretary General and Managing Director, The Geneva Association), Claude Bébéar (Founder, AXA, and Chairman, Institut Montaigne) and Fabio Cerchiai (Chairman, ANIA) at the Italian AXA Forum 2010.

During the conference, there were two particular presentations which offered explanations to this distrust. First of all, the fall in systemic trust is linked in part to the intrinsic nature of the business, as shown in Guiso's analysis. Indeed, it is based on a promise of reimbursement to a determined risk, against a disbursement of money by the client. The entire sector suffers from the negative spillover effects from the bad behaviour of the few who do not fulfill their obligations, or do so only in part. It also suffers from the spillover effects from the negative behaviour of other actors in the financial sector, as demonstrated during the crisis. This shows that the insurance sector does not explain its true social role properly and in full.

Then, the particular case of Italy and Italians' perception and trust in insurance was detailed in a survey conducted by the GPF research institute, on behalf of the Forum. This research has shown that the crisis accentuated the poor perception of the insurance sector. Since 2008, the percentage of those who are sceptical about insurance companies has risen to 71 per cent. However, the importance of the personal relationship and the bond of trust formed between a consumer and his/her agent or distributor has risen to 43 per cent. Interviewees stated that the person offering insurance is more important that the company he/she represents. The most positive finding is that two out of three Italians agree that they feel safer with a good insurance policy, which shows that Italians are increasingly convinced of the need to be insured properly. Faced with these facts, a debate arose in the Forum on the roots of the gap between trust with the physical person of the insurer and institutional distrust towards insurance companies.

Insurance companies also share responsibility for debasing the (dis)trust mechanism. Aside from the traditional Italian debate on costs and frauds, there is a basic issue linked to the service given to clients and the way in which insurers report to them. The key to trust involves not only a different concept of transparency, but also a greater intimacy and a "caring" attitude. Insurance companies should therefore focus on recapturing customers' trust by taking responsible actions and attitudes collectively in their role within society.

Financial Stability in Insurance Steering Committee and Working Group

In 2010 the Systemic Risk in Insurance project was renamed Financial Stability in Insurance (FSI)—a change that reflects the breadth of the project's current concerns, of which systemic risk is just one part. Thus the Steering Committee and Working Group were renamed and have worked through 2010 and into 2011 on a multitude of issues including the designation of Systemically Important Financial Institutions (SIFIs), Supervisory Intensity and Effectiveness, Over the Counter Derivatives Reforms, the AIG Case and the reliance on Credit Rating Agencies (CRA) and standard-setting.

The groups are organised such that the Steering Committee discusses and decides on the strategic direction of the work and delegates tasks to the Working Group—approving the ultimate publication of its work. It consists of representatives from 11 member companies. The Working Group comprises 40 individuals from 22 member companies. The members of the Working Group have been included in several work streams in order to carry out preparation work and fact-finding for The Geneva Association's ongoing dialogue with the IAIS and FSB. Key milestones in this process have been the two presentations delivered to the IAIS Financial Stability Committee, the first on 7 December 2010, the second on 17 February 2011.

The Working Group provides the Association with leading company specialists for specific work streams. This enables the project to call on the most up-to-date and knowledgeable practitioners amongst members' companies around the world. This knowledge is then combined with The Geneva Association's proprietary work.

Questions or issues raised by the Steering Committee and/or raised by the supervisors are therefore split into constituent work streams and are addressed by individual expert groups. The reports are then delivered either as presentations to the supervisors or as publications—in the form of a follow-up report to the existing reports or as an additional paper in an *Insurance and Finance Special Contribution* (SC) newsletter. All of them are accessible on The Geneva Association website and are mailed to specifically identified target groups.

The administration of this Working Group is managed by Daniel Haefeli, Head of the Insurance and Finance Programme of The Geneva Association. Research input from The Geneva Association is organised by Etti Baranoff (Research Director). All is regularly coordinated through conference calls inviting all Group members to participate. In the preparation to the two presentations in Basel, the different work streams held workshops including specialists from different companies. In order to harness additional resources, consultants Oliver Wyman were hired to help draft slides and increase the clarity of the publications with different stakeholders.

The Geneva Association has become a figurehead in the global discussions on financial stability for the insurance industry. Underlying this is the continuous effort and the hard work of the FSI Steering Committee and Working Group. This, and the Association's capacity to mobilise its network and subject specialists on a short notice have been instrumental in this progress.

The Chief Investment Officers Network (CION)

As an activity, insurance asset management differs significantly from the asset management activities of other financial services providers such as banks and pension funds. In order to reflect this particular situation within the financial services industry and to provide the CIOs with a regular possibility for exchange of ideas, The Geneva Association established the Chief Investment Officers Network (CION) in 2008. The inaugural meeting of the newly founded CIO Network took place in June 2008 in Zurich.

The aim of the network is to exchange experiences on key issues facing insurance asset management and to establish a more effective dialogue with government policy-makers, regulators, rating agencies and other external stakeholders of the insurance industry. The target group is Chief Investment Officers and top asset managers from the largest international insurance and bancassurance groups as represented in The Geneva Association and participation is restricted exclusively to them.

The CION strives to create more knowledge and better understanding about issues that confront the role and function of insurance asset management and the formulation and implementation of investment strategies. It serves as a platform for the exchange of information, expertise and best practice approaches. Issues of common concern are identified (without necessarily the objective of developing a single policy position) and members may consider enriching discussions with external stakeholders through the provision of credible research and high-level meetings and seminars. In addition, the network aims to inform government policy-makers and wider public opinion on the key role that institutional investors play within the modern economy. In March 2011, the group met for the 5th CIO Meeting in London. The constantly increasing number of participants demonstrates that there is a significant interest of members in discussing relevant issues in an open atmosphere with peers.

5th Chief Investment Officers Meeting,
31 March 2011, London

The 5th Geneva Association Meeting of CIOs in Insurance took place on 31 March 2011 in London and was hosted by Alain Dromer, Chief Executive of Aviva Investors. The conference series reached a new peak in popularity among CIOs with 32 participants, probably approaching numbers where the integrative and discussion-oriented style of the meeting becomes harder to maintain. Delegates were provided with a series of sessions that covered issues such as The Geneva Association activities on Financial Stability in Insurance, "What Keeps Risk Managers Busy and How this May Impact Insurance Asset Management", and "Efficient Insurance Asset Management in a Continuously Changing Environment". In a special session about the "Macro Economic Issues Affecting Insurance", two themes were discussed, first the "General Economic Variables: Key drivers for the Post-crisis Environment" and second the "Impact of Low Interest Rates on the Life Industry and Implications for Product Design, Investment Strategy and Hedging". During the last session, IAS Board Member Stephen Cooper provided insights into "Insurance Accounting and IFRS Proposals: Impact on Insurance". It became clear during the meeting how important many of the ongoing regulatory debates are for asset management in insurance as CIOs turned their attention repeatedly towards the upcoming changes in regulation.

The next CIO meeting is currently scheduled to take place in early Spring 2012.

The Financial Directors Network (FDN)

The Financial Directors Network is a group of experts attached to the Insurance and Finance Research Programme, which consists of the Chief Finance Officers (CFOs) and Finance Directors of our members' companies as well as a few selected finance experts. The most important activity for the group is the annual Insurance and Finance Seminar (reviewed on page 17), which takes place every year in December in London and is an invitation-only event. Hosting responsibilities rotate among three British members of The Geneva Association: Aviva, Prudential plc and Lloyd's. In 2010 Prudential plc hosted the event under the guidance of its CFO Nicolas Nicandrou

Over the past years, the Seminar has become an important hallmark of Geneva Association activities, and is regularly referred to as one of the most productive events on financial matters in insurance.

In addition to the panels on CEO and CFO perspectives of current challenges and outlook into the near future, the following issues were

Letters to the IAIS, the FSB, Central Bank Governors, Finance Ministers and the G-20

Both the Insurance and Finance and PROGRES programmes of The Geneva Association hold a dialogue with the IAIS and other supervisory bodies. In the discussions on systemic risk regulation a multitude of organisations such as the G-20, the IMF, the OECD, have become involved and influential in the setting of new insurance systemic risk regulations. As a result, The Geneva Association has broadened its discussions and on several occasions and has engaged these other organisations directly in the form of open letters or comments to address points made. The most recent letters are contained in the following pages.

Association Internationale pour l'Etude de l'Economie de l'Assurance
« Association de Genève »

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Geneva, 17 June 2010

Insurance Industry Supports International Association of Insurance Supervisors (IAIS) Position Statement on Key Financial Stability Issues

To the G-20 leaders

cc: Finance Ministers and Central Bank Governors of the G-20

The Geneva Association is mindful of the important work being undertaken by the G-20 and the FSB as well as the need for active and constructive dialogue among governments, regulators, supervisors and the insurance industry in addressing the challenges created by the financial crisis.

It is highly important that any solutions designed to increase the resilience of the financial system appropriately acknowledge the specific characteristics of insurance from other financial services. To that end, we encourage the G-20 to take the IAIS positions and their insurance supervisory expertise into consideration as you and the FSB, move forward with the development of recommendations for addressing potential systemic risk in the global economy.

The statement, issued on 4 June as part of the IAIS's ongoing analysis on systemic risk in the insurance sector, assesses the potential for financial instability in the sector and determines what, if any, regulatory and supervisory action might be appropriate. In doing so, the IAIS has examined risks and circumstances where systemic risk might apply to the insurance sector regardless of whether these circumstances emanate from the insurance sector or are merely transmitted to the insurance sector from another financial sector. This analysis, under the direction of the world's insurance supervisors, found that:

- The insurance sector is susceptible to systemic risks generated in other parts of the financial sector. For most classes of insurance, however, there is little evidence of insurance either generating or amplifying systemic risk, within the financial system itself or in the real economy.
- In circumstances where insurers may amplify risk, an effective regime of regulation and supervision can mitigate these possibilities.
- Non-regulated entities of financial conglomerates and some specific activities (such as financial guarantee insurance) can generate or amplify systemic risk and may be instrumental to contagion within conglomerates or between sectors.

- The IAIS is promoting enhancements to supervision and supervisory processes, combined with stronger risk management and enhanced approaches to international issues related to resolvability to minimize adverse externalities. These enhancements include group-wide supervision (including non-regulated entities) and the development of a Common Framework for the Supervision of Internationally Active Insurance Groups (ComFrame).

- The IAIS is also promoting cross-sectoral macro-prudential monitoring of potential build-up of systemic risk and planning to develop measures for national authorities to assess degrees of systemic risk.

Whilst some of the concerns of the IAIS on potential systemic risks differ from the conclusions of The Geneva Association as detailed in its March 2010 systemic risk report, we welcome the fact that the IAIS took careful note of the insurance business model (including the differences and similarities to banking), analysed systemic relevance and systemic risk vis-à-vis size, interconnectedness and substitutability, underlined the realities associated with the run-off or rehabilitation of insolvent (re)insurers and proposed supervisory enhancements, which are broadly supported by the industry. We trust the FSB will take due account of these elements in the draft report it will submit to you soon.

Should you wish to discuss the contents of this letter or our systemic risk report in more depth, The Geneva Association would be delighted to engage further in this matter.

Yours faithfully,

Dr Nikolaus von Bomhard
Chairman of The Geneva Association
Chairman of the Board of Management, Munich Re Group

Patrick M. Liedtke
Secretary General and Managing Director
The Geneva Association

The Geneva Association is the leading international insurance "think tank" for strategically important insurance and risk management issues. Its membership comprises a statutory maximum of 80 Chief Executive Officers from the world's top (re)insurance companies. It 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.

Insurance and Finance

Association Internationale pour
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Geneva, 17 February 2011

Open Letter to the Finance Ministers and Central Bank Governors of the G-20

Dear Madam/Sir,

Core insurance activities do not cause systemic risks

The Geneva Association, the leading international insurance think-tank, has a great interest in contributing to the IAIS and FSB work on systemic risk and financial stability, but remains very concerned about the political decision taken to develop a list of insurance SIFIs. This view is shared by the world's leading insurers given that the core activities of insurers do not pose a systemic risk.

Extensive Geneva Association analysis published in 2010 and recently refined demonstrates that core insurance activities are not a threat to the stability of the financial system. This is a result supported, not only by the global insurance industry, but also by prominent government leaders, politicians, national regulators and industry experts.

The same research indicated that there are two non-core insurance activities that have the potential, in certain circumstances, to be systemically risky (derivatives speculation/financial guarantees and the mismanagement of short-term funding). New analysis shows that a focus on activity-based indicators (not institutions) will target these potential sources of systemic risk whilst also reducing the regulatory resources required for supervision and the scope for regulatory arbitrage.

Indicators of potential systemic risk activity

The Geneva Association welcomes the opportunity to engage with the IAIS in developing systemic risk indicators. These indicators must be embedded in a sound methodology that first identifies systemically risky activities. They then need to measure these activities in a targeted and effective way. Today, The Geneva Association published a methodology that achieves this whilst providing a framework that matches the stated aims of the IAIS and the FSB.

The Geneva Association believes that insurance expertise needs to be directly involved at all times for making well-informed decisions about a potential SIFI status. The IAIS is best placed to coordinate macro-prudential surveillance and indicator-based standards but should rely as far as possible on group supervision and industry input into the current process. The insurance industry is supportive of The Geneva Association methodology and believes that it will contribute in a constructive way to the setup of an effective and efficient process for identifying potentially systemically risky activities and the institutions undertaking them.

Please contact us if you would like to discuss the contents of this letter or our work on systemic risk further.

Yours faithfully,

Dr Nikolaus von Bomhard
Chairman of The Geneva Association
Chairman of the Board of Management, Munich Re Group

Patrick M. Liedtke
Secretary General and Managing Director
The Geneva Association

March 15, 2011

Mario Draghi, Chairman
Financial Stability Board
c/o Bank for International Settlements
Centralbahnplatz 2
CH-4002 Basel, Switzerland

and

Peter Braumüller, Chairman
International Association of Insurance Supervisors
c/o Bank for International Settlements
Centralbahnplatz 2
CH-4002 Basel, Switzerland

Dear Sirs:

At the urgent request of the national and regional insurance and reinsurance associations signed below which collectively represent over 80% of global insurance business, we would respectfully ask the FSB to extend, by at least ninety days (until October 1, 2011), the timeline for the consideration and finalization of both the methodology and criteria for the determination of Globally Systemically Important Financial Institutions (G-SIFIs). We ask for this primarily out of concern that there has not been adequate and transparent debate at the national and international level whether potential systemic risk issues in insurance are best addressed by G-SIFI designations, nor has there been sufficient consideration of the potential negative consequences that G-SIFI designations will bring. To be useful for all concerned, the additional time period should be accompanied by additional consultations with the opportunity for all stakeholders to provide input.

We acknowledge the efforts of the IAIS to enhance its interaction with Observers in order to foster a better exchange of views. We note that the IAIS made strides to have a preliminary review as it relates to this FSB process. However, this process is as of yet incomplete and the current timeline will not be able to accommodate necessary further work and more comprehensive consultations. It is of particular concern that initiatives to deal with systemic risks on the national and international level are largely disconnected.

There is an overwhelming belief on the part of the global insurance and reinsurance industry that more detailed and transparent discussions are required in order to assess potential systemic risk issues in insurance and to decide on the best approach to address these. Even if the FSB and the IAIS already believe today that a G-SIFI designation process is required in insurance, we strongly believe that a more fulsome and thorough process for engaging the industry is necessary in order to properly quantify and understand the consequences of G-SIFI designations. We would also like to emphasize that the IAIS has already achieved many of the parallel FSB targets as to raising regulatory standards and further development of peer review and reporting. As such, we hope that you will give serious consideration to our request for a deferral. We also believe that granting this deferral is not in any way inconsistent with the political intent of G20 leaders in their desire to balance the root causes of the financial crisis while not harming the recovery. No core insurance activities have caused a systemic financial crisis and, due to the business model, any unwinding of insurance companies occurs over a long period of time, so there is no need for undue haste in addressing what today is largely hypothetical.

We remain supportive of the mission of the IAIS as an international standard setter for insurance and of the mission of the FSB in coordinating and implementing global regulatory communication and cooperation commitments by the G20 leaders on financial stability issues. However, insurers and reinsurers are entities that are supervised and regulated at the national or sub-national level; and the rapid, complex and high level nature of the FSB deliberations on G-SIFIs or SIFIs has implications on sovereign authority and competitive equality that we feel demands a broader and more thorough review. We are additionally communicating this wish to our respective national executive and legislative stakeholders.

We appreciate your consideration of the requested additional time and consultations and would ask you to send your response to Ms. Janice Hilchie, who coordinates the Network of Insurance Associations at the Canadian Life and Health Insurance Association at jhilchie@clhia.ca.

Sincerely,

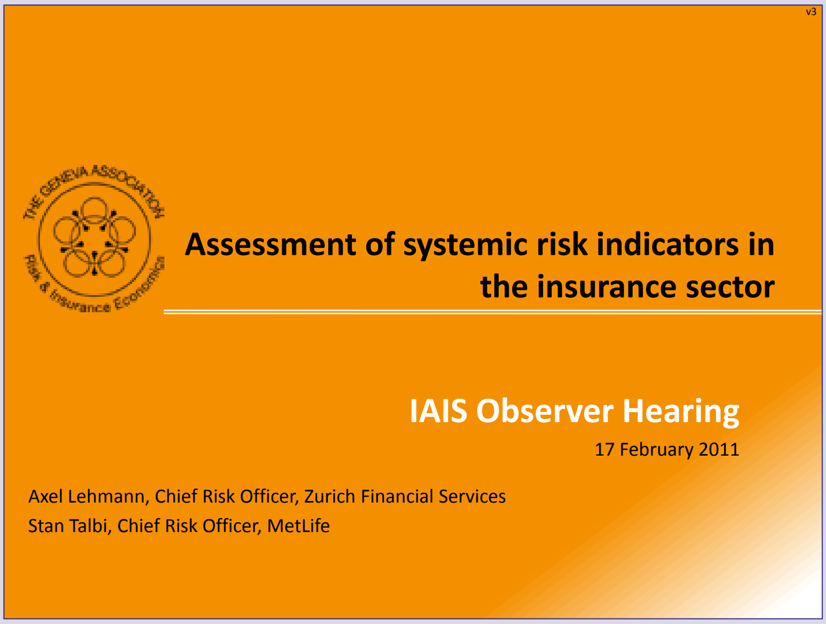
Association of Bermuda Insurers and Reinsurers (ABIR)
Association of British Insurers (ABI)
American Council of Life Insurers (ACLI)
American Insurance Association (AIA)
Association of Savings and Investment of South Africa (ASISA)
Canadian Life and Health Insurance Association (CLHIA)
DIMA (Dublin International Insurance & Management Association)
Dutch Association of Insurers
European Insurance and Reinsurance Federation (CEA)
Fédération française des sociétés d'assurances (FFSA)
Federación Interamericana de Empresas de Seguros (FIDES)
The Geneva Association
German Insurance Association (GDV)
Group of North American Insurance Enterprises (GNAIE)
Insurance Bureau of Canada (IBC)
Life Insurance Association of Japan (LIAJ)
Property Casualty Insurers Association of America (PCI)
Reinsurance Association of America (RAA)

tackled in the panels and subsequent Q&A's:

- Global Insurance Regulation in a Changed World;
- The Next Generation of Solvency—The Industry's Next Steps;
- The Insurance Industry's Appeal to Investors,
- The Outlook for a Single Set of High Quality Global Accounting Standards; and
- The Insurance Industry's Financial Reporting Challenge.

Much of the work that The Geneva Association has carried out on Financial Stability in Insurance this year has included a number of FDN members, be it as participants of the FSI SC and FSI WG or as intellectual sparring partners and speakers in key presentations—for example, the December and February IAIS-FSC observer meetings. The Geneva Association will continue to count on the FDN as an active partner in the many outreach activities in FSI matters which will start in the next months.

Finally, the FDN also provides a very important early warning function for future challenges. Some of the network's members have been active in the industry's direct interaction with regulators and supervisors, policy-makers and politicians, international institutions and the media about where the insurance industry stands on financial issues and which of those are of special relevance to it. We are grateful to the group for their help and support over the last year, particularly our hosts.



At the IAIS Observer Hearing on 17 February 2011, The Geneva Association proposed a set of indicators for the identification of the potentially systemically risky activities.

The Geneva Association pointed out that, in responding to G-20/FSB, it is important that the IAIS develops an adequate methodology with appropriate instruments to:

- assess activities which could be potentially systemically risky (as per FSB/IAIS criteria); and,
- apply indicators specific to the systemic risk activities to identify potential global SIFIs.

Core insurance activities are not a source of threat to the financial and economic system. There are however two potentially systemically risky activities that require further assessment (derivatives speculation/ financial guarantees and mismanaging short-term funding) as contained in an earlier report by the Geneva Association.

PROGRES

"…the regulatory and supervisory aspects of insurance industry developments including legal issues."

Jan Monkiewicz,
Head of PROGRES

PROGRES (Programme on Regulation and Supervision)

The global regulatory community has been continuing its intensive debates in 2010-2011 to search for modernised regulations and supervisory structures better aligned with the changing market realities and capable of preventing another deep financial crisis. Some of these debates have already concluded with new regulatory standards. Generally, 2010 was another year of many post-crisis initiatives in regulation and supervision. Major issues at the global level included stability, "systemicness" (countries, sectors and institutions), governance and the supervisory set up.

PROGRES is a research programme specifically dedicated to investigating regulatory and supervisory aspects of the insurance industry. The major aim of PROGRES is the organisation of a dialogue between the international insurance industry and the global regulatory and supervisory actors. These actors include the International Association of Insurance Supervisors (IAIS), the International Monetary Fund (IMF), the Financial Stability Board (FSB), the Organisation for Economic Cooperation and Development (OECD), the National Association of Insurance Commissioners (NAIC), the European Insurance and Occupational Pensions Authority (EIOPA). The dialogue helps both parties to understand each other better and PROGRES provides the forum for those interactions. The provision of the platform requires research, monitoring and organisational activities.

The PROGRES mission is threefold: researching regulatory and supervisory issues, providing a discussion platform among the stakeholders and supporting the outreach activities of The Geneva Association.

At the jurisdictional level major changes have taken place in the U.S., the EU and the U.K. which resulted in new supervisory and regulatory setupS. The U.S. is by far most advanced in legislative actions with the Dodd-Frank Act approved in July 2010, and many other changes introduced since then. The EU has managed only to upgrade its supervisory system; so far, however, more is still in the preparatory stage (new solvency regulations, regional resolution mechanisms, insurance guaranty schemes). The U.K. is entirely in its implementation stage which, however, will take place in the next two or so years and which will transfer much of the powers in regulation of the financial sector, including insurance, to the Bank of England.

Apart from the crisis-stimulated work streams, a substantial part of the programme's activities covered autonomous work streams. The IAIS has continued its work on the major revision of its Insurance Core Principles (ICP), implementation of the ComFrame and the Global Solvency Standard. The NAIC has concentrated much of its effort on solvency modernisation initiatives, whereas EIOPA has dedicated its efforts predominantly to Solvency II implementation.

Review of the 26th PROGRES Seminar

14-15 April 2010, Montreux

The Geneva Association is taking an active part in the regulatory discussions by bringing top expertise and resources to the table. The best example of our approach is the PROGRES seminar run in 2010 for the 26th time. It brought together around 100 experts from the regulatory community, business and academia from all over the world. They were given presentations by key regulatory experts coming from global and major national regulatory institutions, the industry, consumers and academia and interacted and exchanged views. Before the major body of the seminar, a special session on systemic risk and insurance was held due to the feeling that this issue is of immense practical importance and very complex in its theoretical

Forthcoming Book:
The Future of Insurance Regulation and Supervision—A Global Perspective

Written by leading academics, researchers and insurance industry experts, this book offers a diversified perspective on how the regulatory and supervisory framework for the insurance sector will develop over the coming years.

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dimensions. It is also because there was a desire to better propagate the findings of the *Systemic Risk in Insurance* (SRI—now Financial Stability in Insurance, or FSI) report of The Geneva Association published only a month earlier in front of non-insurance experts. Two papers were presented during the session. One was the report on systemic risk in insurance developed by The Geneva Association and the other was *Systemic risk and U.S. insurance sector* prepared by Mary Weiss on behalf of NAIC.

The topic of the Seminar was "Global regulatory and supervisory repair: aligning national interests and international necessities: Balancing regulation and supervision in search for optimal global solutions". It started with an excellent keynote speech on "Globalization, crisis and what next?" delivered by Professor Grzegorz Kołodko, former Deputy Prime Minister of Poland, from the Leon Kozmiński University in Warsaw. The programme was split into five sessions: the impact of the crisis on new international regulatory set up; macro oversight and individual prudence; insurance safety nets—solvency rules developments worldwide and policy-holder protection in a globalizing world; insurance groups and financial conglomerates; and, quality of regulatory and supervisory systems. The speakers attending were key officers of the IAIS, including its Chairman, EU Commission representatives, key national regulators (Germany, NAIC, FSA Japan, CFNS Mexico, FINMA Switzerland, Federal Bank of Boston, Banque de France), the World Bank, IMF, FSB, consultants (A.M. Best, Cantillo and Benett, Risk and Regulation Consulting), industry representatives (U.K., France, Bermuda) and academia (Germany, U.S. and Switzerland).

The Geneva Association/IAIS Executive High-Level Meeting (HLM)

14-15 April 2010, Montreux

The High Level Meeting (HLM) has become a permanent element of PROGRES work since 2008. Its intention is to review, in an informal setting, critical elements of the regulatory agenda of a global standard-setting body in insurance and provide an insurance industry perspective. The discussions tend to be very open and as informal as possible. It is appreciated both by participating companies' representatives as well as within IAIS ranks. It is a symbol of our strong relationship with the IAIS as it is the only meeting of this type held with them. It should be underlined that formally The Geneva Association is only one of the 126 Observers of IAIS.

The IAIS Executive Committee is a statutory body that runs the IAIS. It is composed of 26 members representing 146 jurisdictions. It is currently chaired by Peter Braumüller, Managing Director of the Austrian Financial Market Authority, assisted by Yasuhiro Hayasaki, Vice Chairman of International Issues at the FSA Japan.

The first two HLM meetings—in 2008 and 2009—took place in Brussels. In 2010, HLM was held for the first time back-to-back with the PROGRES Seminar in Montreux on 14-15 April. The 2010 meeting centred around three up-front selected topics:

- regulation of systemic risk;
- global solvency standards; and,
- industry-IAIS dialogue.

The actual debate has been dominated by systemic risk issues. The basis for the discussion was provided by The Geneva Association report *Systemic Risk in Insurance, An Analysis of Insurance and Financial Stability*. It was prepared in response to the questions raised at the October 2009 Observer Hearing of IAIS by a coalition of global insurance firms in association with The Geneva Association.

First meeting of PROGRES International Trade and Insurance Group

11 March 2011, Geneva

The PROGRES International Trade and Insurance Group (ITIG) meeting, held

PROGRES

From left to right: Jan Monkiewicz, Vice Secretary General, Head of PROGRES and Liaison—Eastern Europe, Axel P. Lehmann, Group CRO, Zurich Financial Services, Yoshihiro Kawai, Secretary General, IAIS, Janko Gorter, Senior Economist, De Nederlandsche Bank, and Philipp Keller, Partner and Head of Insurance Risk, Deloitte AG, at the 2011 PROGRES Seminar.

in March 2011 in Geneva, was the first PROGRES informal meeting for insurance sector representatives to discuss the key issues arising from trade agreements with services negotiators from country missions to the World Trade Organization (WTO) in Geneva and officials from international organisations. It was attended by the Australian, Canadian, Pakistani, Mexican and American missions, as well as the United Nations Conference on Trade (UNCTAD) and WTO representatives and private sector participants, including Julian Arkell, The Geneva Association's expert on international trade, The CityUK, the LOTIS committee, the International Insurance Foundation, ACLI and the American Insurance Association.

The attendees presented and discussed the World Trade Organisation's Doha Development Agenda Round (DDA) of negotiations, the recent WTO Seminar debate on the financial crisis, the work on the GATS Article VI:4 on Domestic Regulation, the services negotiating situation, and service trade liberalisation via Mode 4. Issues raised by the insurance representatives included digital trade in financial services, the value of insurance services for economic growth and development, the balance between permitting trade in insurance services and sound regulation based on IAIS standards, the restrictions on cross-border trade, and the adverse situation on reinsurance in Argentina and Brazil.

In the the DDA trade negotiations, the aim is to conclude the modalities' text on agriculture and merchandise by Easter 2011. This will enable the services negotiators to dig deeper on offers for specific commitments, including for financial services, and prepare for a services cluster meeting in the second half of April 2011. Members will have to work through the various sensitivities to elicit improved offers. The Committee on Trade in Financial Services (CTFS) will discuss developing country issues and try to rehabilitate the financial services discussion from the bad light cast by the crisis. New regulations will be assessed and myths dispelled, for example, the myth that liberalisation is the same as deregulation.

A recent WTO Seminar debate on the financial crisis was a landmark event, involving presentations by the IMF, the OECD and standard-setters. China will sponsor a discussion on financial services and development at the next CTFS meeting. A classifications body is

Karel van Hulle, Head of Insurance and Pensions, the European Commission, at the Q&A Session of the 2010 PROGRES Seminar.

perhaps needed, separate from market access negotiations, to serve the negotiators by giving clarity on classifications, especially for the new offers. The Committee on Specific Commitments is working on classification issues for all sectors, so it could rely on the CTFS for input on financial services. Work on GATS Article VI:4 on domestic regulation is proceeding at the Working Party on Domestic Regulation with the aim to produce a new text by Easter 2011. The necessity test is at the top of the problems list. Special and differential treatment for developing countries is being considered.

However, the services negotiating situation is still subject to the agriculture and merchandise position. Currently, there is not the same level of clarity for services, with nothing in writing, even on the offers of July 2008, nor from the bilaterals and plurilaterals, on which to harvest the ongoing results. In April the plurilateral request will be the focus, and experts from capitals will be in Geneva. As financial services are so important, the intensity of engagement will be heightened, after two years of dormancy, but there is less than six months to achieve good results. Much liberalisation has been undertaken autonomously, which is well known, but many countries do not agree that binding such levels is beneficial. All offers are conditional, but any new ones are not in writing. The request and offer process is flexible, but a refusal to make an offer can only be countered by exerting leverage on non-service products.

On Mode 4 liberalisation, it is not just the developing countries which have a strategic interest. The issues have become conflated with unemployment and illegal immigration which are not Mode 4 concerns. The industry is to indicate what is most beneficial and explain its interests to the negotiators, because this is a pre-requisite for the GATS deal.

Review of other PROGRES Research in 2010/2011

Jan Monkiewicz, Head of Research, PROGRES, and Patrick M. Liedtke, Secretary General and Managing Director of The Geneva Association, have edited a book on the fundamentals of future insurance regulation and supervision—communication with policy-holders, policy-makers and society, which is essential reading for all insurance and finance professionals, as well as regulatory experts in the field of insurance. It will be published in April 2011.

The major thrust of the book is a demonstration of the specificity of the insurance industry vis-à-vis other financial market operators and banks in particular, and the consequent need for insurance-specific solutions and not just the replication of ideas developed for banking institutions. It addresses both global and regional issues and will be published in other languages including Spanish, Chinese and Russian in 2011.

The other major product, brought to the market in 2010, was an insurance textbook for students published in Polish by Poltext and supported by two other teaching volumes (see page 112). It is a result of the cooperation between The Geneva Association and the Polish Insurance Group (PZU). The textbook has been officially recommended by the Polish Academy of Science for use in the classes on insurance and finance.

Apart from working on the books, the PROGRES Programme continued to distribute *PROGRES*

PROGRES

newsletters, which constitute an important forum for a dialogue on current regulatory issues. Each edition brings four to seven contributions from different parts of the world and offers different perspectives. The newsletters appear in June and December and are edited by Jan Monkiewicz.

In the June 2010 issue (No. 51) Julian Arkell, the trade expert from the Secretariat of The Geneva Association, reported on major discussion points of the 26th PROGRES seminar. Mary Weiss, a distinguished scholar at NAIC, provided an overview of the solvency framework in the U.S. Caroline Cobb and Marike Brady from the American Council of Life Insurers (ACLI) in the U.S. discussed the reforms of the U.S. reinsurance regulation. Martin Simhandl, CFO of Vienna Insurance Group provided his critical remarks regarding Solvency II. Marian Małecki, from PZU, commented on the successful listing of PZU on the Warsaw Stock Exchange, where demand exceeded the supply of shares by nine times, and the share price on the first day of trading was 12 per cent higher than the offer price, and on new developments perspectives.

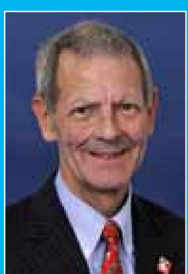
In the December 2010 issue (No. 52) Dennis Kessler, CEO of SCOR, formulated some structural observations regarding the future of global regulatory and supervisory system. Marcelo Ramella, from the Bermuda Monetary Authority (BMA), and Sebastian von Dahlen, from the IAIS, provided insight into macroprudential surveillance in insurance. Uwe Siegmund, from R+V Insurance Group, explored the arguments against central bankers as insurance supervisors. Richard Murray reported on the 7th International Liability Conference.

In editorial policy there is an attempt to balance informative and analytical contributions. The newsletter operates in highly competitive space filled both by commercial, academic and trade initiatives, not least the Financial Services and Regulatory Update in Europe, the Financial Services Regulatory Weekly Update in U.K. or the Financial Network Institute in U.S.

In 2011, a new research project was initiated on the regulatory costs in insurance with the review of existing literature and available databases.

Risk Management

"…seeks to understand the nature of emerging and key strategic risks and to understand how and where they relate to insurance."



Walter R. Stahel
Head of Risk Management

Risk Management

The management of risks can take many forms, so whilst risk management is integral to insurance, insurance is only one feature of risk management. The Risk Management Programme seeks to understand the nature of emerging and key strategic risks, such as climate risks and extreme events, and to understand how and where they relate to insurance. In times of increasing risk aversion with a need for better risk management and insurance solutions, this programme plays an increasingly important role.

Risk Management is one of the earliest research programmes of The Geneva Association. In 1975, it made the first survey of risk management practices with the European manufacturing industry. Since then, Risk Management has been one of the main lines of our research activities. The first *Risk Management* newsletter was published in June 1984.

The focus of the Risk Management Programme is to:

- provide a platform for the insurance community, the engineering and academic communities and policy-makers to discuss issues on balancing risks and opportunities;
- be a facilitator for the Chief Risk Officers (CROs) of The Geneva Association members and CROs in general;
- foster the use of the tools of risk assessment and risk management in new fields of application, such as policy-making;
- promote the concept of the insurability of risks as the "natural" borderline between State legislation and the market economy;
- identify new opportunities for insurers in the emerging sustainability concept in order to enlarge the field of insurable and insured risks; and,
- research and illustrate the new risks in the emerging service economy, based on an extended performance responsibility of economic actors.

The Risk Management Programme furthers and delivers its output through the Risk Management newsletter, the annual seminars and the CRO meetings:

- The *Risk Management* newsletter is published biannually. Past issues of all newsletters are available in pdf format on our website *www.genevaassociation.org*.
- The M.O.R.E. Seminars (Management of Risk in the Economy) are open to experts from academia, insurance, industry and policy-making. The papers of the seminars are published in the series *Etudes et Dossiers*.
- The CR+I Seminars (Climate Risk and Insurance) are open to experts from academia, insurance, industry and policy-making. Again, the papers of the seminars are published in the series *Etudes et Dossiers*.
- The ART of CROs Meetings (Annual Round Table of Chief Risk Officers) are held in spring; these meetings are open to Chief Risk Officers of The Geneva Association's members.
- The Annual CRO Assemblies are open to CROs from all insurance companies and related sectors.

Specific research projects are initiated on topics of high relevance on a temporary basis, such as the CR+I Project, started as CC+I (Climate Change and Insurance) Project at the 2008 General Assembly in Bermuda, and extended at the 2009 General Assembly in Kyoto.

A continued horizon scanning allows identifying new topics with high risk uncertainty, including specific issues such as the lack of maintenance on infrastructure in all countries, the slow disappearance of proprietary information and secrecy, as well as wider areas of societal risks, such as legislators' recent approach reflecting a social vision of insurance, the political decision to nationalise insurance assets observed in Hungary, or the brewing risk pot in Europe fuelled by youth unemployment and illegal immigration.

Additional articles and studies on risk management issues are regularly published in *The Geneva Papers on Risk and Insurance—Issues and Practice*. The Geneva Association also regularly publishes books and articles in journals on risk management issues, and finances outside studies on emerging risk management issues.

The risk management seminar series has continuously enabled The Geneva Association to identify new topics and deepen the insight into these topics, or extend our understanding to new regions.

The series of annual seminars on "Managing Risks in the Economy" continues to be very successful. The M.O.R.E. 24 Seminar held in June 2010 in Bermuda looked into Modelling and Mapping Risks. It will be followed on 12-13 July 2011 by the M.O.R.E. 25 Seminar, looking into Modelling and Mapping Risks and Opportunities.

The new series of Climate Risk and Insurance Seminars focuses on identifying the regional differences with regard to climate risks. Taking into account the name change of the CC+I Project to CR+I, the seminar is now the 3rd CR+I Seminar and will be held 18-19 October 2011 in Singapore, on the topic of "Interactions between the Private Sector and Asian Policy-makers on Mitigation and Adaptation for Extreme Events and Climate Risks". It is jointly organised with the Institute of Catastrophe Risk Management (ICRM) in the Nanyang Technological University, Singapore.

The programme Head, Walter R. Stahel, takes an active role in international meetings and expert groups. He was a member of the Steering Committee of the Society of Risk Analysis (SRA) Europe, participated at meetings of the United Nations Environment Programme (UNEP) Insurance Industry Initiative, and has given presentations at major Risk Management conferences, including the 60th Anniversary Annual Conference of the World Meteorological Organization (WMO) in Geneva.

Climate Risk Overview

In May 2008, following a mandate from its members at the 2008 General Assembly, The Geneva Association began its CC+I research project in response to one of the most multi-faceted challenges to the insurance industry since its inception—climate change. The project builds on the considerable expertise that The Geneva Association has acquired in this area over more than three decades through its activities as part of its ongoing Risk Management Research Programme.

As a result of the mandate, The Geneva Association established a working group of experts from a dozen of its members, complemented by external experts from internationally renowned institutions.

The Climate Change and Insurance (CC+I) Working Group of The Geneva Association

A special working group, the CC+I Working Group, was established following the launch of the research project "Climate Change and Its Economic Impact on Insurance" (CC+I) in 2008 to study the relationship between climate change and insurance as well as to coordinate the project development. The Climate Change and Insurance Working Group consisted of 24 experts, both from member companies of The Geneva Association (Allianz SE, AXA Group, AXIS Capital Holdings Ltd., Lloyd's, Munich Re, SCOR, Swiss Re, Tokio Marine & Nichido Fire Insurance Co., Tryg, Zurich Financial Services) and from internationally renowned academic and research institutions. The Group was co-chaired by Kunio Ishihara, Chairman, Tokio Marine & Nichido Fire Insurance

Company and Michael Butt, Chairman of Axis Capital Holdings.

The main objectives of the CC+I research project were to identify and analyse:

- issues that are of specific relevance to the insurance industry, such as possible future claims developments, new business opportunities and scenario testing;
- external challenges to be addressed at the political, educational and social levels, such as the role of government-specific provisions concerning, e.g. building codes, zoning restrictions, etc.; and,
- the frontier between risks and opportunities from extreme weather events and those from climate change.

The CC+I project was a logical step in the development of the Risk Management Research Programme of The Geneva Association, which started with responses to external factors, such as risk engineering and the analyses of natural hazards, in the 1980s. The 1990s saw the inclusion of the challenge of sustainability, followed at the beginning of the 2000s by organisational and functional issues, such as the role of the CRO and solvency reforms in Europe and other regions.

The 3rd Working Group meeting was held 17 November 2010 in London. At this meeting, it was decided to refocus the CC+I Project on resilience to extreme events, with the topics of sustainability, resilience to extreme events and uncertainty, and to include the CC liability issue as a separate element into the future structure.

The CC+I Working Group was dissolved at the end of 2010, to make way for the Climate Risk and Insurance (CR+I) Project. This project includes a new Climate Risk Liability Sub-Committee (CR+I LSC), which has its own working group, consisting of invited experts. Overall guidance is in the hands of the Chairmen of the CR+I Initiative, Kunio Ishihara, Chairman of the Board, Tokio Marine & Nichido Fire Insurance Company Ltd, and Michael Butt, Chairman, AXIS Capital Holdings Limited. The Liability Sub-Committee will be chaired by Richard Murray, Special Advisor, The Geneva Association, with Lindene Patton, Chief Climate Product Officer, Zurich Financial Services Group, as Deputy Chair, and coordinated by Walter R. Stahel.

2nd Climate Change and Insurance (CC+I) Seminar

São Paulo, 27-28 September 2010

On 27-28 September 2010, the 2nd Climate Change and Insurance (CC+I) Seminar of The Geneva Association took place in São Paulo, Brazil. The conference was hosted by Allianz Brazil and addressed the topic of "Climate Change: Opportunities for Latin American Insurers?". About 50 participants attended the conference, mainly from South America, but also Europe and the U.S., coming from insurance and re-insurance companies, international organisations, universities, research centres, and governmental agencies. This seminar followed an earlier seminar organised in 2009 in Bogotá on "Insurance industry and climate change with a Latin American focus".

The seminar was organised around three workshops: 1) Climate change (politics) after COP15 Copenhagen; 2) Potential impacts of climate change on the Latin American economy; and, 3) Potential impacts of climate change on the health of Latin American and Caribbean populations

It came out from the seminar that new opportunities for insurance in South America are first those linked to low-income population groups. The link with climate change is that the marginal conditions of these people can be critically aggravated by adverse climate related events. It was stressed that while Latin American Countries (LAC) have contributed least to global climate change, climate change will hit the LAC disproportionally hard. And climate change will impact low-income populations in these countries even harder, as it jeopardizes the little they have. To provide housing, health and

Risk Management

Issues of concern in 2010/11

Risk Management in a fuzzy world logic

Within a short time, the risk landscape has seen "sudden and unforeseeable changes"—normally a definition for insurable risks—that may profoundly change industrialised societies and the field of insurable risks. ***The first such change is a shift from scientific risk perception and analysis to a general and global discussion led by the media.***

Risk management has always been the art of making judgements in the absence of complete information. But this task was done by scientists, as exemplified in the science fiction movies of the last century which always starred a know-it-all scientist. If in the past risk was an issue for scientists and experts, sometimes accused of being biased by the people funding their activity, it is now the general public without even a basic knowledge who discusses the issues on social networks, such as Twitter and Facebook, demanding immediate action by politicians. In addition:

- Events as a consequence of acts of God, such as the nuclear disaster caused by the tsunami in Northern Japan, are no longer accepted as acts of God or f*orce majeure*, which would exclude human liability.
- The issues of risk assessment, risk perception and risk communication have been mixed up by the earthquake and tsunami of 11 March 2011. For instance, nuclear power stations in Europe now have to be checked for their vulnerabilities to earthquake and tsunami risks which are outside the scientifically possible.
- Technological and economic progress enables everybody to buy such instruments as Geiger counters, and to measure ever smaller concentrations of chemical elements, which automatically are regarded as contamination. Concepts such as "natural background radiation", "legal thresholds limits" or "maximum admissible doses per unit of time" are ignored.
- The "contaminated" vegetables banned in Japan as unfit for consumption could have been sold in Europe as they are well below the limits of tolerance.

Cultural differences in dealing with risks become visible but are ignored in the global media. Japan's historic acceptance of geo risks and its discretion in dealing with suffering became apparent in the pictures and information in local versus European media after 11 March.

The second change is a new dynamic in what constitutes liability. Liability claims used to be based on principles such as causality. The closing down of nuclear power plants in Germany, based on a zero-risk interpretation of the precautionary principle, may lead to attacks on the government by the utility companies for the resulting loss of income because the link is clear.

Courts are also part of this shift, reflecting a social vision of insurance. These changes have attracted a rapid growth and diversification of "Litigation Funding" by third party investors, which could be another transforming force influencing the role of liability as a social, economic and regulatory force over the next decade, according to Richard Murray, head of the Liability Subcommittee of the Climate Risk and Insurance project.

The third change is in societal risks, a soft term for such sleeping risks in society as:

- Overwhelming sovereign debt in Euro-land and the U.S. could lead policy-makers to redefine private-sector liability in order to protect bankrupt Nation States from having to assume the role of insurers of last resort.
- Persisting youth unemployment, leading to a situation where people will become unemployable, could lead to the emergence of "days of wrath" and riots in industrialised countries, similarly to Egypt and Tunisia, according to some experts.
- The disappearance of the myth of proprietary or secret information might completely change the way we trade information and data.

Persistent youth unemployment, rising poverty among old age pensioners (OAPs)

France has a population of 65 million, of which 26 million are working. Of the non-working population, about 8 million are in the age group of the 16 to 26 year old—the cohorts that should take the place of the elderly people near retirement. But of the 16-26 year old, a third are misfits because the people cannot read nor write, do not speak French sufficiently and are not familiar with French manners. One third of the 16-26 year old age group is equal to 2.6 million young people—10 per cent of the working force—which will probably never enter the labour market, accumulate pension rights or pay taxes.

But the situation of pensioners in many countries may not be brighter. Thirty five per cent of people planning to retire in the U.K. this year will do so with incomes below the poverty line, according to new research from Prudential. Prudential's Class of 2011 study surveyed people intending to retire this year and also revealed that 19 per cent will retire on an annual income of less than £10,000 a year. Gender and geographical differences make things worse.

The myth of proprietary information

Secrecy has always been violated by some to gain an economic advantage or power over another people or organisations. Among them are criminals, corrupt officials and secret service agents, but also commercial data dealers such as credit information agencies and private eyes. But the public knew that using public systems, such as letters sent by postal mail and calls over phone lines, was safe, thanks to a State guarantee and a State punishment for abuse. Recent political and technological developments have started to change this situation.

On the other hand, it has become easier to detect theft of proprietary data, such as unauthorised quotes from publications (copyright violation). The German minister of defence zu Guttenberg and Saif Gaddafi both lost their PhD at the beginning of 2011 when it was discovered that they had copied text from older publications. Plagiarism has always been done, but Internet made it first extremely easy to do, then to be detected.
Consumers are not aware that mobile phone conversations are unsafe, in contrast to conversations over fixed phone lines.

Perception of technology risks after 11 March The waves of the tsunami of 11 March have proved to be a true "Black Swan". It has sent ripples around the world, and created a surge need for information that nobody foresaw. March 11 hit at a time when many politicians, in an effort to reduce GHG emissions, discovered their love for nuclear energy because of its low-carbon nature, and when most car manufacturers fell in love with e-mobility. The six nuclear reactors that went out of control in Fukushima may have abruptly destroyed these dreams.

If nuclear reactors in Europe should be decommissioned before the end of their technical life-time, and the plans for new reactors shelved:

- Electricity prices will increase in countries where populations are already hard hit (EURO-land), and the risk of a soaring inflation will show its ugly face again.
- Prices of other energy, such as oil, gas and coal, will rise with increases in demand.
- Scarcity will lead to black-outs as experienced in Japan, or the reductions promised under the Kyoto Protocol will be out of reach if coal and gas-fired power stations will jump in to reduce the risk of wide-spread power cuts.
- Dreams of battery-powered electric automobiles will die a sudden death, leading to huge stranded capital and technologies, as well as untamed CO^2 emissions.
- The technology, research and market power will focus on South Korea, China and the U.S. that have all declared to continue exploiting nuclear energy.

These changes will affect the economy as a whole and the insurance industry not only in countries where, for political reasons, nuclear energy is no longer an option. On the risk side, inflation threatens pensions and life insurance, power cuts will trigger business interruption claims, investments into clean (battery) technologies may go into default. On the opportunity side, applications of existing technologies that can deliver high electricity efficiency, such as demand-controlled pumps, may take off. Applications of unpopular non-carbon heat sources, such as geothermal energy, will soar. The Hydrogen Society based on fuel cells will receive a push for stationary applications (buildings) and automobiles and other vehicles, enabling Japan to exploit its advantage. These technologies already exist and will gain a considerable cost advantage.

education in tandem with economic development is recognised as the winning strategy—one without the other is not possible. While urban and rural poverty are widespread, they require different solutions.

The presentations of the first day confirmed that climate change is happening, and probably at a faster rate than anticipated so far. São Paulo is situated at an altitude of 800 meters above sea level, and thus safe from average sea level rise, but in a flood plain of three rivers, which expose the city to different kinds of floods.

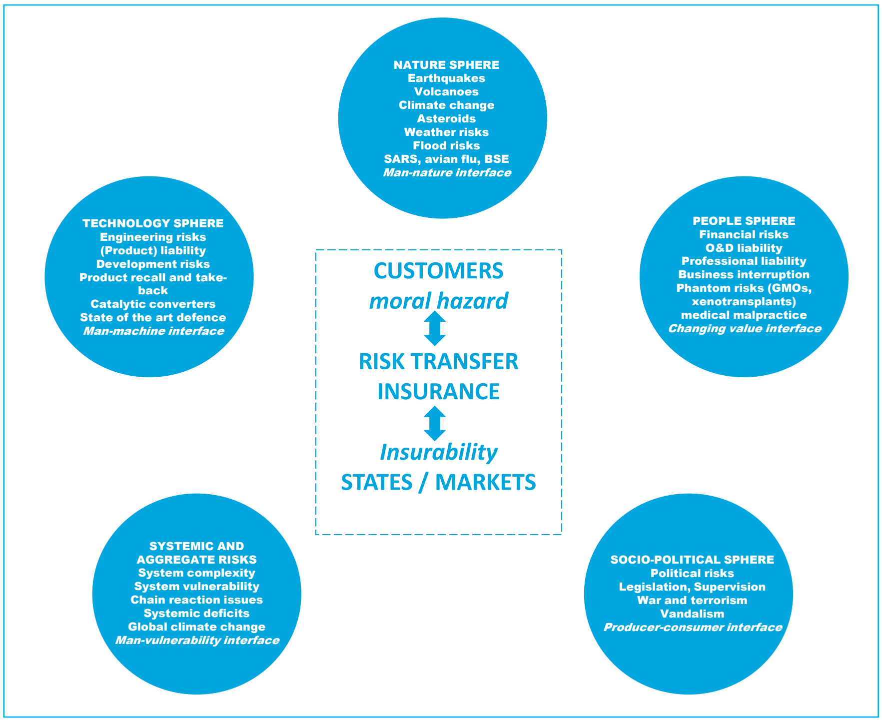
The presentations of the second day showed that the demand for basic insurance is there, notably in urban areas, especially with regard to personal security: life insurance, disability, funeral insurance, critical illness, hospital costs and loss of ability to work for individuals.

On the supply-side, insurance is exploring new distribution channels, such as insurance affinity programmes (piggyback riding on utility bills, for example) and micro-insurance, as well as new "impersonal" flat rate contracts. Bottom-up solutions were presented by Women's World Banking, the oldest and most widely active micro-credit institution for poor women.

But, while these new forms of insurance were only started a few years ago, they do not have a real track record so far. Indeed, they are based on the basic survival needs of the low income populations which do not own property or automobiles. Payment can be in cash or of necessities, such as electricity bills.

It also came out that climate change is likely to impact the health insurance sector through an increase in health care costs. Drivers of this impact are likely to be an increase in disease caused by water- and food-borne vectors. Tropical and endemic diseases such as malaria and dengue fever would spread far more widely through mosquitoes and other insects, with major impact on patterns of disease and death rates. Air pollution may also increase causing respiratory issues. Floods, drought and higher temperatures

Risk transfer in insurance—Five realms of risk



The table presented here shows the variety of climate risks and opportunities. It separates the events with a potential human influence—where mitigation is therefore one strategy—from events which are extreme weather events, where adaptation is the most promising strategy.

Hierarchy of CR+I risks and opportunities

Level of issue	opportunities	risks
Celestial	solar energy, tidal (marine) energy,	asteroids hitting Earth, solar eruptions disrupting IT and telecom services, solar wind disrupting the magnetic field
Global		
Planet Earth	global commons, using geothermal energy, biodiversity	georisks (volcanoes, earthquakes, tsunamis, magma flows)
Global Climate Change *anthropogenic*	**mitigation measures**	***partly possible*** ***influence, potential CC liability claims***
GHG concentrations	changes in agro yields geopolitics favouring Russia changes in health food and water supply	changes in agro yields geopolitics in favour of Russia changes in health food and water supply
Rising sea levels		flooding of low level land
Ocean currents	wave (marine) energy	changes in Gulf Stream
Atmospheric currents	jet streams in aviation	El Niño, La Niña
Population		mass climate migrations
Regional	**adaptation measures**	
Extreme weather events	new insurance products	higher severity and frequency
Hailstorms River floods Twisters Windstorms		
Local	**adaptation measures**	
Extreme weather events	new insurance products	higher severity and frequency
Avalanches Flash floods Mudslides Storm surges		
Micro	GMO crop yields	microbes invasive species (termites, tiger mosquito) resulting risks (timber constructions, human health such as dengue fever)

MITIGATION

HUMAN-INFLUENCED CC

ADAPTATION

could cause changes in crop yields which will have significant health as well as economic effects. Heat waves also affect the health of the most vulnerable segment of the population, i.e. the youngest and oldest.

All in all, this seminar showed that climate change affects various regions differently. Some areas may suffer from drought and very high temperatures with the social and health implications this implies. The seminar made it possible to look at the specific implications for South America and the Caribbean, particularly the politics of climate change after Copenhagen, the potential impacts of climate change on the Latin American economy as well as the likely impacts on the population.

Joint Statement of The Geneva Association, UNEP-FI, MCII and ClimateWise: "Risk management and climate change in the developing world"

On 6 September 2010, The Geneva Association and three other initiatives (ClimateWise, MCII and UNEP-FI) launched a statement that calls on governments worldwide to harness risk management techniques and insurance expertise to help implement climate change adaptation measures in the developing world. In the context of the increasing economic and human costs of climate change in the developing world, the statement seeks to highlight how governments can unlock significant potential to increase the protection and reduce the vulnerability of developing world populations and economies. For a full copy of the Statement, see page 48.

1st Asian Climate Change Summit

16-18 January 2011, Singapore, co-hosted by Asia Insurance Review and The Geneva Association

The two-day Summit, "Tackling Climate Change—Being Ready to Face Threats & Opportunities", attracted more than 150 delegates from around the world.

Asia also has 10 of the 16 most vulnerable countries—according to the Climate Change Vulnerability Index 2011—and this necessitates risk mitigation measures. This has paid off in places like Japan, where 2009's Typhoon Melor resulted in 6 per cent insured losses, said Mr Tan Yong Soon, Permanent Secretary, National Climate Change, with the Prime Minister's Office in Singapore, in his Official Keynote Address.

The key point raised at this climate change summit was that the insurance industry plays a major role in managing the risks of climate change. The insurance industry needs to become a reference point for tackling climate risks, as well as be a proactive partner for governments and global bodies, said Mr Patrick M. Liedtke, Secretary General and Managing Director of The Geneva Association at the 1st Climate Change Summit.

"*Climate change requires proper risk management and an adequate response that is in line with the size of the threat. If we find the right partnership and legal framework, a lot of uninsurable risks become insurable*," said Mr Liedtke.

It was noted that while insured losses could be easily identified, total losses are more difficult to measure. Emerging countries, especially, need better solutions to protect their citizens. If individuals do not or cannot protect themselves, the State will have to be responsible for doing so.

Asia vulnerable

Providing a scientific angle to the climate change topic was polar explorer Pen Hadow, Survey Director of the Catlin Arctic Survey, who pointed out the impact of melting ice on atmospheric temperature as well as ocean circulation. With sea levels expected to rise by up to a meter by 2100, this is a warning for countries such as India, China, Bangladesh and Vietnam, which have among the world's most populated and lowest-lying areas.

ClimateWise REDUCING THE RISK FOR TOMORROW | The Geneva Association | MCII | UNEP Finance Initiative Innovative financing for sustainability

Global insurance industry statement on

Adapting to climate change in developing countries

Four leading insurance climate change initiatives, whose combined membership includes more than a hundred of the world's leading insurers across Africa, Asia, Europe, North and South America, and Oceania, have combined their members' expertise to present this Statement. ClimateWise, The Geneva Association, the Munich Climate Insurance Initiative (MCII) and leading insurance companies within the United Nations Environment Programme Finance Initiative (UNEP FI) are collaborating to highlight the huge potential benefits of using government action to enable the knowledge and expertise from the insurance industry to play its fullest role in risk management in developing countries, particularly those most vulnerable to the impacts of climate change. This government action includes implementing national risk management processes and using limited government investment to measure and reduce those risks.

Climate change science underscores the imperative for societies to urgently mitigate greenhouse gas emissions. The insurance industry is facilitating investments to harness new technologies and help move towards a low carbon economy. However, it is clear that a massive scheme of adaptation measures will also be needed, especially in the most vulnerable countries – countries that have contributed least to climate change but will suffer worst from its effects. Insurance solutions have the potential to provide tangible results for the most vulnerable countries and soften the blow of climate-related disasters.

Governments must recognise that they and all stakeholders, including the insurance industry, have a common interest in enhancing welfare and sustainable growth in the developing world. They should therefore take into account the need for, and opportunity of, stronger global collaboration to respond to this challenge and take steps to reduce climate-related risk in the developing world, particularly for the most vulnerable communities.

Insurance is one of a broad scope of risk management approaches that can facilitate adaptation to climate change and shore up sustainable development.

In particular, the insurance industry can support adaptation efforts through:

- **Expertise in risk management**, particularly in areas such as risk and vulnerability assessment, putting a price tag on risk, and the design of risk reduction and risk transfer activities
- **Prioritising adaptation measures** by enhancing adaptive capacity and advising on the cost-effectiveness of resilience measures
- **Incentivising loss reduction** by informing economic actors about the risks they face, advising them on risk mitigation options and providing them with existing insurance options for loss reduction
- **Developing new insurance products** which cover risks affected by climate and weather events, such as human health, crop yields and animal diseases
- **Raising awareness among the many stakeholders of the insurance industry** – including governments and regulators, clients and business partners, business and industry, civil society and academia – about the impacts of climate change, the adaptation needs of those most at risk, and the role that the insurance industry can play in advancing adaptation, as described in this Statement.

Risk Management

International climate negotiators and governments are looking towards insurance as one of a set of solutions to reduce the impact of climate change on the developing world. However, governments must act to create an enabling environment in which insurance can operate effectively.

To date, governments still have much work to do to implement commitments already made at the 2005 World Conference on Disaster Reduction to effectively address the nature and scope of risks, especially those facing developing countries. Notwithstanding missing the potential opportunity to improve the lives of millions, continued government failure to implement loss prevention and risk transfer measures could have significant consequences such as the potential loss of life, a perpetuation of the poverty trap, mass migration and a potential increase in widespread disease.

Effective government support and implementation of risk management measures is the critical path in addressing these issues and the creation of an environment in which insurance can work effectively. We therefore call on governments to:

- Support proposals to **catalyse adaptation efforts through risk management, loss prevention and risk transfer**, particularly in those countries most vulnerable to the impacts of climate change
- Consider language such as the following for **Paragraph 8** of the Adaptation negotiating text under the United Nations Framework Convention on Climate Change:
  a. *"Enhancing climate change related disaster risk reduction strategies, considering the Hyogo Framework for Action where appropriate; early warning systems; risk assessment, and management and sharing and transfer mechanisms such as insurance….at local, national, subregional and regional levels, as appropriate, to address loss and damage associated with climate change impacts in those developing countries that are particularly vulnerable to the adverse effects of climate change…"* [1]
  b. *"Decides to elaborate modalities and procedures for the international mechanism to address loss and damage, for adoption by the Conference of the Parties at its seventeenth session;"* [2]
- **In practical terms**, we call on governments to:
  a. Engage in risk reduction activities by taking action on the already agreed Hyogo Framework for Action 2005-2015 for disaster risk reduction. These include appointing a national risk officer with the mandate to develop a holistic risk management culture, facilitating community, regional and state level loss reduction activities, climate-proofing existing infrastructure investments and putting in place appropriate zoning and building codes and enforcing these – all of which will contribute tangibly to managing risks and loss potential
  b. Provide a suitable enabling environment for risk management, including insurance, through good corporate governance frameworks and those systems necessary for financial market services to function for all levels of society and across appropriate time horizons
  c. Invest in systematic and reliable risk exposure data, both historic and forward-looking, which is made freely available to the public, with multiple adaptation applications
  d. Act on lessons learned about the role of Government in convening and seeding regional public-private partnerships such as the Caribbean Catastrophe Risk Insurance Facility and microinsurance systems which address risk reduction for weather-related risks

Market mechanisms are already operating to create and grow insurance practices in developing countries. However, without a suitable enabling economic and regulatory framework, insurance risk management mechanisms are falling considerably short of their potential to deliver adaptation benefits. By working together, governments have the means and capability to leverage this potential, increase protection of individuals and the economy, reduce weather impacts and foster growth through the implementation of insurance risk management systems.

1 Paragraph 4e of the current draft UNFCCC negotiation text. See UNFCCC (2010) Second iteration of the text to facilitate negotiations prepared by the Chair of the AWG-LCA FCCC/AWGLCA/2010/8. http://unfccc.int/resource/docs/2010/awglca11/eng/08.pdf

2 Paragraph 8, Option 1 of the current draft UNFCCC negotiation text. See UNFCCC (2010) Second iteration of the text to facilitate negotiations prepared by the Chair of the AWG-LCA FCCC/AWGLCA/2010/8. http://unfccc.int/resource/docs/2010/awglca11/eng/08.pdf

Examples of where insurance has already provided effective risk management solutions in developing countries, particularly those most vulnerable to the impacts of climate change, include:

1. **The Caribbean Catastrophe Risk Insurance Facility (CCRIF)** is a public-private partnership designed to limit the financial impact of hurricanes and earthquakes for 16 Caribbean governments. Established in 2007, the Facility provides short-term liquidity (within 2 to 3 weeks) to participating governments when the policy is triggered by a catastrophe, such as the 2010 Haitian earthquake. The Facility uses a parametric mechanism to determine the potential future risk and trigger a payout whenever a pre-defined modelled loss level is exceeded. By pooling the risks of its members, CCRIF serves as a risk aggregator and can provide insurance coverage at a comparatively low premium for otherwise mostly uninsured catastrophe risks borne by sovereigns. CCRIF member states decide on the level of coverage for each peril insured. This Facility illustrates that dialogue between governments and insurers can create tailored, institutionally light and flexible solutions for particular regions.
   For more information, visit www.ccrif.org.

2. **Horn of Africa Risk Transfer for Adaptation (HARITA)** is a parametric insurance scheme that brings together climate change risk mitigation and crop insurance for farmers and has been rolled out in five communities in Northern Ethiopia. Underwritten by a local company, and reinsured by a global reinsurer, it uses a rainfall index to trigger compensation for farmers growing the Ethiopian three staple grain crops in case of drought. It is unique, however, in allowing farmers to pay for their premiums through labour on projects that will mitigate the effect of climate change in their area, such as tree planting. To turn the labour into monetary value, the scheme takes advantage of a national government "cash for work" programme, which enables it to reach the most vulnerable farmers. HARITA therefore integrates insurance with both risk reduction and credit provision. By allowing very vulnerable farmers to pay their premiums through risk-reducing labour, farmers benefit even when there is no payout because these risk reduction activities will help minimise vulnerability to drought and improve yields. Lack of cash is the main reason that people do not participate in insurance schemes. Using this government national cash for work programme is a way to address this issue and to scale up the size of the programme. Cash-paying farmers also participate in the programme, advancing market development. The programme will roll out to the Tigray region in 2011. Nationally about eight million farmers are beneficiaries of the cash-for-work safety net..
   For more information, visit www.oxfamamerica.org/articles/weather-insurance-offers-ethiopian-farmers-hope-despite-drought.

3. In **Mongolia**, the World Bank and other organisations have been actively involved in developing programmes for sustainable livelihoods that emphasise pastoral risk management including early warning systems and risk preparedness actions, access to supplementary feed and grazing reserves, coordination of pastureland use, and conflict management. These measures were combined with efforts to extend the outreach of microfinance services to herders, and community-prioritised investments in basic infrastructure. An index-based microinsurance coverage helps reduce the administrative costs of insurance, making it more affordable. Microinsurance and complementary interventions in a wider risk management framework in Mongolia are therefore helping reduce herders' vulnerability to climate and non-climate hazards. The main objectives of the insurance scheme, provided by the Government of Mongolia in partnership with local private insurance companies and banking organisations, is to provide insurance coverage against catastrophic livestock mortality events to complement household-level risk management strategies for smaller livestock mortality losses. The programme involves the domestic insurance market while protecting it against extreme losses, and also limits the government's fiscal exposure to loss and damage. Participating herders pay fully loaded risk premiums and if the livestock mortality during a harsh winter is between 6%-30%, the involved insurance companies cover the losses with some combination of herder premiums, their own capital, global reinsurance and contingent credit from the World Bank if necessary. The government pays for losses in excess of 30% using only the contingent credit. Herders bear the cost of smaller losses which are not likely to affect their business in the long term. This self-insurance for livestock mortality, with rates of up to 6%, leads to risk-reducing behaviour by the herders because of the strong incentive to engage in activities that may decrease the mortality risk of their livestock. This index insurance does not cover every single livestock loss due to winter conditions – it is about addressing consequential losses and extra costs that come with a harsh winter, killing large numbers of adult animals.
   For more information, visit www.globalagrisk.com.

4. **Weather insurance in Malawi**. The value of data collection in the establishment of insurance mechanisms is well demonstrated by a project in Malawi. A combination of sufficient weather stations and start-up assistance helped by the World Bank and World Food Programme helped start a pilot weather insurance project. The insurance pilot bundles loans and insurance for nearly 1,000 smallholder farmers enabling them to buy affordable index-based drought insurance. The insurance is linked to loans and both improves the creditworthiness of participating farmers and enables them to increase their farm productivity. A challenge with such initiatives tends to be scalability: current schemes tend to cover only a few hundred or thousand farmers but with government assistance this could be scaled up. An initiative in India launched in 2007 offered insurance with crop loans and was taken up by 700,000 farmers.

5. **Index-based insurance to promote climate resilience in Bolivia.** An insurance scheme has been developed in four provinces in the north and central Altiplano regions of Bolivia that combines incentives for proactive risk reduction and an insurance index mechanism. In this scheme the index is based on the production levels of reference plots of farmland in areas which are geographically similar in terms of temperature, precipitation, humidity, and type of soil. A group of farmers identify a peer who is considered to use the best available methods. That farmer serves as a technical assistance agent to help other farmers reduce their risks and improve their yields. The system encourages other farmers to match the reference farmers in implementing risk reduction efforts to reduce the effects of drought, excess rains, hailstorms and frost. The reference farmer's land becomes the reference plot, the yields from which serve as an indicator of whether production levels have been adversely affected by environmental factors (triggering an insurance payout) or by other factors within the farmer's control. The objective becomes to perform or outperform the reference plot by improving agricultural practices and reducing risk of damage from weather hazards.

For more information, visit www.fundacion-profin.org.

The insurance climate change initiatives represented in this Statement:

ClimateWise
REDUCING THE RISK FOR TOMORROW

ClimateWise is the global collaboration of leading insurers focused on reducing the risks of climate change. Launched in 2007 by HRH The Prince of Wales, and facilitated by the University of Cambridge Programme for Sustainability Leadership, ClimateWise brings together over 40 international members from Europe, North America, Asia and Southern Africa all of whom abide by the ClimateWise Principles.

www.climatewise.org.uk

Contact: andrew.voysey@climatewise.org.uk | +44 20 7216 7530

The Geneva Association

The Geneva Association is the leading international insurance economics "think tank" on insurance and risk management issues. Its members are 90 CEOs of the world's leading re/insurers. The objectives of the Association's climate-linked research have been to identify and analyse issues of specific relevance to the insurance industry, such as the likely range of future claims costs, and external challenges to be addressed at the political, educational and social levels.

www.genevaassociation.org

Contact: anthony_kennaway@genevaassociation.org | +41 22 707 6606

MCII

The Munich Climate Insurance Initiative (MCII) was initiated by Munich Re in April 2005 in response to the growing realisation that insurance solutions can play a role in adaptation to climate change, as suggested in the Framework Convention, the Kyoto Protocol and the Bali Action Plan. This initiative is formed by insurers, climate change and adaptation experts, NGOs, and policy researchers intent on finding solutions to the risks posed by climate change – both on the negotiating floor and on-the-ground in developing countries.

www.climate-insurance.org

Contact: warner@ehs.unu.edu | +49 228 815 0226

UNEP Finance Initiative
Innovative financing for sustainability

The United Nations Environment Programme Finance Initiative (UNEP FI) is a strategic public-private partnership between UNEP and the global financial sector. UNEP works with nearly 200 insurers and reinsurers, banks and investment firms, and a range of partner organisations, to understand the impacts of environmental, social and governance issues on financial performance and sustainable development. Through a global programme encompassing research, training, events and regional activities, UNEP FI identifies, promotes and realises the adoption of best environmental and sustainability practice at all levels of institutional operations.

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4 **Adapting to climate change in developing countries**

Risk Management

Many Asian countries have insured losses which are up to 10 times lower than those in developed countries, said Mr Jan Mumenthaler, Head of the Insurance Services Group at the International Finance Corp. With the surge in number of megacities—many in the region—exposure to climate change should be carefully considered.

Nowhere is this more apparent than in the world's most populous nation, China, as Ms Helen Ye, Executive Director of Aon Benfield China pointed out. Citing statistics from Asia Infrastructure, she noted that out of the world's 100 fastest growing cities with a population of at least one million, 33 are in China. With economic losses from natural disasters bearing an increasing impact on the country, it is necessary for the domestic insurance industry to quickly adapt to the changing risk landscape.

Minimising the impact

Such adaptation measures include improving crop and grazing land management and water usage as well as cultivation techniques for key commodities. "*The broader application of risk mitigation instruments and insurance across the supply chain will spur major increases in investment, productivity and food security in vulnerable regions,*" said Mr Roman Hohl, Head of Agriculture, Asia Pacific, Swiss Re.

Other newer insurance solutions for both the corporate and retail markets have also surfaced in recent years to mitigate climate risks. These include discounts for eco-cars offered by Sompo Japan, "green" home and travel insurance by HSBC Insurance, serial loss covers and performance covers.

These offerings sometimes require different business approaches—it is not always direct insurers who innovate.

Asked for his wish list, Mr Ernst Rauch, Head of Corporate Climate Centre, Munich Re, expressed his hope to see a "*clear price tag*" placed on carbon emissions, but was not optimistic that this would happen. "*Reducing the carbon footprint is the most efficient and scientifically sound way of tackling climate change ... but why do governments not act? There is probably the concern that if they act, there will be an impact on the economy. But most countries do not want a global approach…or be the first mover.*"

A big role to play

Shailendra Yashwant, Campaign Director, Greenpeace Southeast Asia, called on the industry to "*stop insuring and underwriting fossil fuel-based industries and ... all industries that are destroying forests, for example palm oil, soya, pulp and paper, until such companies change their destructive practices.*"

Insurance should instead cover forestation projects to maintain their long-term viability, said Mr Darryl Hawke, Head of Forestry & Carbon with Insurance Facilitators. "*Photosynthesis is the only technology proven to reduce carbon dioxide,*" he explained. "*Forestry is not the [only] solution, but it will help us buy time.*"

Summing up the lessons for the insurance industry, Mr Masao Seki, Chief Corporate Social Responsability Officer of Sompo Japan Insurance said: "*Insurers have a big role to play through its core business to build a sustainable, low-carbon and inclusive society. It is extremely important for an insurer to set up an effective multi-stakeholder partnership involving international organisations, governments, civil societies, business enterprises, consumers and local communities.*"

Risk Management in 2011/12

During a workshop of the Working Group of the CC+I Project on 17 November 2010, The Geneva Association took two decisions which, with hindsight, have proved very worthwhile. It was decided to:

- change the focus from climate change to resilience to extreme events; and to
- launch a liability subcommittee to study the liability dynamics with regard to climate change and extreme events.

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As from 2011 onwards—The shift to the CR+I project

The initial CC+I Project included global and scientific topics of climate change (CC), which were dealt with in the first chapters of the Geneva Report N° 2, *The insurance industry and climate change—Contribution to the global debate*. Not all of these topics will be actively pursued, i.e. involvement in the Intergovernmental Panel on Climate Change (IPCC) work/discussions better known and accepted will be limited, much in line with the general understanding that The Geneva Association should extend its outreach component.

The first two CC+I Seminars in Bogotá (2009) and São Paulo (2010) have shown that climate change in the Southern Hemisphere is primarily perceived as a threat to populations, both as hazards in health and agriculture (food) and as risks, such as increased floods and mudslides. The future work on adaptation thus needs to understand and take into account regional issues. In order to broaden our understanding of the southern hemisphere, it has been decided to organise the 3rd CR+I Seminar in Singapore. Asia is the region which, in 2010, suffered the highest economic losses of about US$ 75 billion from catastrophes, or a third of total economic losses from disasters worldwide.

The CR+I (climate risk and insurance) Project integrates these insights and will focus on adaptation and managing extreme events, including climate change. The main emphasis will be on how to increase the resilience to extreme events; we therefore have to be sensitive to regional differences. A closer contact to national CROs and disaster reduction, civil protection and emergency management offices will help, as these structures reflect the regional differences in risks. But in addition, contacts on the international level will continue. The CR+I Working Group will be adapted accordingly in the transition from the CC+I Project.

Unlike the CC+I Project, the CR+I Project will incorporate a new Climate Risk Liability Sub-Committee (CR+I LSC), founded at the end of 2010, which has its own working group, consisting of invited experts. Overall guidance is in the hands of the Chairmen of the CR+I Initiative, Kunio Ishihara and Michael Butt; but the liability sub-committee will be chaired by Richard Murray, with Lindene Patton (ZFS) as Deputy Chair; and coordinated by Walter R. Stahel.

As the modern world sees certain governments collapsing, the number of natural catastrophes seemingly increasing and the global economy still quite fragile, people are catching on to the importance of proper risk management and insurance. The programme thus will continue to be a prominent pillar of The Geneva Association's work, both to inform and also to offer solutions to the insurance industry and the population at large. It will continue to develop creatively, to respond to current and future threats.

Liability Regimes

Liability Regimes Working Group

The Liability Regimes Project has evolved over its nine year lifespan, as the drivers of new forms and applications of liability exposure have gained momentum, and has expanded its scope of activity in response to liability generating developments of the past two years.

The Project was launched to study the unique forces that generate liability exposures for insureds and insurers. There is a widespread misconception that liability law is created by statute and applied by Courts and regulators in ways that are predictable by studying historical data. In fact, both civil law and common law legal systems are increasingly prone to allow liability recoveries not contemplated by statute, responding instead to the influence of societal demands for compensation, the need for governments to transfer social support systems to the private sector and the driving force of greed by an industry of legal and others who profit enormously by crafting new theories and procedures for recovery.

For insurers, this creates potential opportunities, but also presents two serious hazards:

- The naïve assumptions held by public policy-makers that insurance is an endlessly elastic resource able to distribute the costs of greatly expanded liability losses through premium spreading to all classes of business, so that these changes are deemed harmless to the economy.
- The tendency of Courts and Regulators to impose expanded liability standards retrospectively, as best illustrated by the severe damage done to the industry by asbestos and tobacco liability.

The events of recent years that have most significantly expanded the liability challenge have ranged from the global financial crisis to an extraordinary number and severity of extreme physical loss events.

As the financial crisis unfolded, many thought leaders assumed that it was simply too large, global and unexpected to present serious private sector liability losses. But the last two years have seen rapid growth in the number and scale of claims arising from economic turmoil. The claims activity is not sufficiently matured to declare how damaging it will ultimately be to insurers, but the potential risks are severe. It is also important to recognise how similar these claim patterns are, for example, to the creative and retrospective asbestos losses.

A more subtle, but perhaps more threatening, pattern of liability exposures is emerging from the extreme physical loss events. The events themselves are undergoing dramatic escalation in frequency and severity: volcanic eruptions affecting transportation and supply chains, windstorms creating wildfire and flooding, and earthquakes with their tsunami consequences are well-known worries for insurers. But they are rapidly expanding from first party property and mortality loss events to third party liability claims seeking to enlarge and distribute the recoveries for those enormous losses and related sufferings. The ingenuity of liability recovery proponents is just beginning to show in emerging claims and new theories, which the Working Group is studying as an aid to timely insurer anticipation and preparation.

The Liability Regimes Project has expanded its reach over the past year in an effort to keep ahead of the trend and events, in order to be kept abreast with the fact that new exposures can be hazardous to the industry's health.

New activity includes:

- Dedication of the 2010 Annual Liability Regimes Conference in London in October to emerging risks associated with environmental and climate-related claims. Conference participants were divided in their view of whether, and to what extent, traditional liability defences would be protective for insurers, but those views grew more concerned from assessments taken at the opening session and a similar profile of opinions at the end. There was a parallel growth during the conference of concern that insurers generally lack the expertise and the policy tools to deal effectively with these conditions.
- Because of the energised discussions at the 2010 conference, the 2011 Conference in Munich is planning to focus on the economic losses and liability-based loss distribution efforts as a deeper look at these critical issues.
- The Liability Regimes Conference series is preparing for its first expansion outside the Annual European session, with a conference in June in Beijing. That event will also deal with environmental and climate-generated liability risks as they may affect the Chinese market. The event, co-sponsored with Swiss Re and with the active participation of Munich Re, is hoped to be the start of regional conferences emphasizing the implications of changing

liability conditions in developing economies.

- The Association's Board of Directors has commissioned a new initiative, the Liability Subcommittee of the Climate Risk and Insurance (CR+I) Programme to provide dedicated attention to the interactions between extreme weather events and their liability consequences. The early efforts of lawyers and regulators to distribute losses from windstorms etc. by creating new standards in law and legal processes has been joined by international and intergovernmental groups seeking to foster such recoveries. An illustration is the publication recently of a United Nations study purporting to establish that the world's 3000 largest companies are directly responsible for more than US$2 trillion in losses due to their carbon emissions. This seems clearly to be first step toward replacing traditional standards of proving causation and loss consequences to support liability claims. The new Sub-Committee will actively link the study of liability developments with the objectives of CR+I.
- The research, monitoring and production goals of the Liability Project will also accelerate to meet these demands. The Liability Regimes Working Group is focusing currently on two related phenomena: the increasing legal and regulatory tolerance for allowing individual claims to be amalgamated into class actions, mass torts and collective actions, supported by a dramatic increase in the tolerance for the involvement of third party investors and public company financing agents to fund liability claims. An early product of that effort was the article in *PROGRES* newsletter N° 52 (December 2010) entitled, "It Is The Mass, Not The Tort".

On the research side, 2010 saw an attempt to draw a line between extreme weather and climate change, to include coastal management into the analysis, and to study the possible impact of potential climate change litigation based on the deep pocket theory (first discussed at the liability forum in London, 20 October 2010).

One of the highlights of the year 2010 was a breakout session at the General Assembly in Zurich, on 4 June, on the subject of "Between Business Development, Financial Markets and Social Expectations—Insurance and Climate Change". The discussion also touched upon the definition of a borderline between climate change and extreme weather events, which is important for two reasons:

- CC as a scientific problem is global; the impacts of CC, however, differ greatly locally and regionally and have to be analysed on a smaller scale,
- CC, according to the IPCC report, is partly man-made, and resulting losses could become the subject of litigation actions.

The ART of CROs Network

"Risk management" is a subject with many different meanings and objectives. In the past, insurers, industrial corporations and banks have tried to clarify some of the issues involved by creating the position of CRO. The Geneva Association, jointly with its members, decided to hold annual events to promote the understanding of the role of the CRO. The CROs Network comprises CROs and risk management professionals of member companies as well as invitees to the CRO Assembly, which takes place once a year. It is organised alternately by Munich Re and Swiss Re. Members of the CRO Network went on to form the CRO Forum to advocate excellence in risk management, originally responding to the Solvency II process. The Chairman of the CRO Network is an observer at their quarterly meetings.

Hans Peter Würmli succeeded Bruno Porro on 1 July 2010 as Chairman of the CRO Network. As with the former Chairman, the main responsibility is the management of risk management content and of some activities of the CRO Network, one of which is the Annual

Risk Management

Round Table of Chief Risk Officers (ART of CROs). All of this takes place in cooperation with Walter R. Stahel, Vice-Secretary General and Head of Risk Management Research. An additional new responsibility is the (re) search, handling and management of topics and activities suitable for promoting the new outreach activities of The Geneva Association.

CRO Forum

The CRO Forum is an action-focused network of more than a dozen members of the ART of CROs from major insurance companies with the objective of identifying concrete issues of some urgency and financing research studies to clarify these issues. The results of these studies are made available to wider audiences through the ART of CROs meetings and the CRO Assemblies. All publications are available on *www.croforum.org*.

The ART of CROs meetings

In 2002, The Geneva Association created, within its Programme on Risk Management, an "Annual Round-Table of Chief Risk Officers". Its objective is to provide the CROs of the member companies of The Geneva Association 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. Meetings are held annually, normally in spring. Each event is sponsored by a CRO and his or her company. The events are thus held at changing locations to share the financial burden.

These meetings also offer the researchers of The Geneva Association the opportunity to discuss their research activities with the risk specialists of the member companies, and to identify and prioritise themes and issues of interest to The Geneva Association's members.

The aim of the ART of CROs is to enable a strong exchange of ideas between participants. Each session is launched by a short kick-off presentation, followed by an extensive discussion. Attendance is limited to approximately 25 CROs on a first-come-first-served basis.

The 8th ART of CROs—Annual Round Table of Chief Risk Officers

29-30 April 2010, Lisboa, Portugal

The 8th ART of CROs was organised jointly by The Geneva Association and Companhia de Seguros Tranquilidade. It was well attended, with the participation, among others, of the CEIOPS' President, Gabriel Bernardino, the CEO of Tranquilidade, Peter Brito e Cunha, and representatives from Aegon, Manulife Financial, Allianz and Tokio Marine and Nichido Fire, Ltd. The round table was focused on the themes of risk, capital and management; internal model issues and implementation; supervision and Solvency II; and, emerging risks.

On the first day, speakers and participants investigated the many capitals that steer insurers and the ambiguity and contradictions stemming from them. They also looked into securitisation of insurance risk and the risk management framework and its underwriting. Then, they focused on the implementation of internal models and their issues.

On the second day, all attendees discussed valuation of liabilities, the most likely outcome of Solvency II reporting requirements, what defines a risk manager and regulations today. Then, they moved on to the subjects of the transition to Solvency II and the key issues for supervisors, the latest updates in emerging risks and the regional differences in climate change.

This meeting was the opportunity for risk officers to look at risk management today and how to adapt to current threats and hurdles. Indeed, the risk management landscape is rapidly changing and CROs will be the first to have to come up with inventive and optimal solutions for insurance to play its role to the fullest.

The 9th ART of CROs will take place in Basel, Switzerland, on 12-13 May 2011, hosted by the Bâloise Insurance Company.

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The Annual CRO Assemblies

These events are open to a larger audience of CROs from insurance, banking and industry as well as insurance associations. Their objectives are to disseminate the knowledge gained, and to discuss the issues identified by the CRO Forum and the ART of CROs workshops with a larger audience of risk management professionals. The CRO Assemblies are organised by The Geneva Association in collaboration with the Swiss Re Centre for Global Dialogue and Munich Re, alternately, to provide a discussion platform for CROs to address current and emerging risks and opportunities with their peers, as well as leading experts from academia, major insurance and reinsurance companies. Participation is by invitation only. Registration is on a first-come-first-served basis.

Furthermore, the Assemblies provide a valuable and comprehensive overview of the prevailing risk landscape by analysing the conclusions reached by different CRO think tanks and relevant industry studies. In addition, the annual Assemblies offer interesting external perspectives from industry observers and are an excellent opportunity for networking, designed to foster an environment conducive to interaction and dialogue. Input on topics to be addressed and contributions from participants are welcome.

The 6th CRO Assembly was held on 24-25 November 2010 at Munich Re in Munich, and was organised jointly by The Geneva Association, Munich Re and the CRO Forum. The theme was "The significant problems we face cannot be solved at the same level of thinking we were at when we created them" (Albert Einstein).

The 7th CRO Assembly will be organised jointly by The Geneva Association, Swiss Re and the CRO Forum on 16-17 November 2011, and held at the Swiss Re Centre for Global Dialogue in Rüschlikon, Zurich.

CROs Network in 2011

Topical focus in 2011 will be given to one organisational and several risk management issues, with one issue—low interest rate policies—dominating all others. All will be dealt with at the ART of CROs in Basel in May 2011, which is supposed to act as a knowledge transmission vehicle by having members of the CRO Network participate in sharing experience, thoughts and ideas on risk management issues of mutual interest.

The "organisational" topic is a simple Pillar two qualitative risk management one: how to optimally use the CRO Network and the companies' risk management organisations for advocacy.

Low interest rate policies of central banks, its consequences and potential risk management measures will occupy our minds and efforts for some time to come. As is well known, central banks have intervened in capital markets in order to lower yields across all maturities. This massive manipulation of the prices of investment instruments has pushed default-risk-free interest rates to historic lows, indirectly putting a large part of the cost of this intervention policy on insurers and pension funds. Because their implicit, explicit and often guaranteed investment return assumptions of products are higher than current risk-free rates, this will most likely drive insurers and pension funds into higher risk investments (or else to accept losses for some years for certain). The full extent of these imposed costs will probably only become manifest when the now building "speculative" bubbles burst, which can be years from now.

Further topics for 2011 will be the implementation of Solvency II, global climate change, liability, modelling and the convergence of solvency and accounting standards, particularly in the valuation area. The "Systemic Risk" issue is dealt with by the Insurance and Finance Programme.

Risk Management

The 6th Chief Risk Officer Assembly—A Vision for Risk Management in the New Normal

24–25 November 2010, Munich, Germany

(by Manuela Zweimüller, Munich Re)

The goal of the annual CRO Assembly events is to promote an understanding of modern risk management in insurance and the role of the CRO. This is done through a series of workshops and studies and other initiatives in this area. These allow attendees to share their experiences and to get to know colleagues with similar responsibilities in other insurance companies. This annual risk management platform also provides a forum for dealing constructively with strategic issues facing the insurance industry through direct contact with a global network of leading experts. Another objective of the CRO Assembly is to spread and discuss risk management knowledge with other sectors and help cross-fertilise ideas and concepts.

The 6th CRO Assembly was hosted by Munich Re, The Geneva Association and the CRO Forum at Munich Re's headquarters in Königinstrasse, Munich, and dealt with the theme "A vision for risk management in the new normal".

The 2010 CRO Assembly focused on risk management in the so-called "new normal", the era after the crisis and its recovery from the global shockwaves. The future is likely to differ from the past as never before. The beginning of such a new era is characterised on the one hand by lower growth, stricter regulation, structural breaks in the business environment and fundamental changes in consumer behaviour but, on the other hand, also by new opportunities in a changing world. After the fog of uncertainty has dissipated, the consequences for risk-taking and risk management have still to be explored.

Thus, participants investigated the risks and opportunities of this new normal era for risk management from the perspectives of all relevant stakeholders, examined the influence of risk management on boardroom decisions, and devoted time to discussing the different aspects and impacts of systemic risks in our industry. Also addressed were important issues relating to the acceptance and structural changes of risk management, which are necessary inside and outside our business environment.

The Assembly was structured into four leading topics which were covered extensively in keynote speeches, presentations, panel discussions and breakout sessions:

- Insurance business in the "new normal" and its impact on risk management and accounting
- Risk management—New job sharing between corporate governance and whether supervision and management are required
- Managing systemic risks—Squaring the circle?
- Risk management best practice: Turning vision into reality.

Prominent speakers included Adrian Clark, Member of Aon Benfield UK Executive; François Bucchini, CEO of AXA Global P&C; Axel Lehmann, Group CRO, Zurich Financial Services; Elke König, Member of the International Accounting Standards Board; Tom de Swaan, Member of the Board of Directors, Zurich Financial Services; Jens Riedel, Egon Zehnder International; William Hawkins, Head of European Insurance Research, Keefe, Bruyette & Woods Ltd.; Avinash D. Persaud, Head of the Barbados Office of the Caribbean Policy Research Institute (CaPRI) and Chairman Intelligence Capital; Michaela Koller, Director General CEA; Tobias Guldimann, CRO, Crédit Suisse; Takaaki Tamai, Member of the Board, Senior Managing Director, Tokio Marine & Nichido Fire Insurance Co., Ltd.; Gideon A. Pell, Senior Vice President and CRO, New York Life Insurance Company; Munich Re's Reinsurance CEO, Torsten Jeworrek and CFO, Herrmann Pohlchristoph, the new Head of Reinsurance Development, Carsten Prussog; the Chair of the CRO Forum's Emerging Risk Initiative, Jörg Grünenwald, as well as a series of member

Risk Management

CROs and the 2010 Chair of the CRO Forum, Jean-Christophe Ménioux.

The key findings of the 2010 CRO Assembly can be summarised as follows:

- The insurance industry may face some very challenging issues in the years to come—CROs will play a vital role in proactively proposing strategies and solutions that help to anticipate and manage difficult risk situations.
- In contrast to banks, the insurance industry as a whole does not harbour systemic risk. However, there is a significant risk that regulators will choose to extend the banking-oriented framework to the insurance sector. We need to develop more comprehensive and concrete alternatives—insurance-specific solutions—and we need to do this in close cooperation with policy-makers and regulators.
- Only a global standard will provide consistent and transparent accounting practices, measurement models and a coherent framework so that complex insurance contracts and emerging issues can be dealt with, ultimately providing users with relevant and comparable information for their decision-making and judgment.
- The new normal brings many challenges to the industry but, by carefully assessing and managing risks and thus allowing a controlled extension of the limits of insurability, risk management makes it possible for opportunities to be seized in economically difficult times.
- A different perspective on risk management —other than a purely mathematically-based view—may be helpful in assessing and judging risks. A "risk management without numbers" approach—i.e. a complementary, more qualitative system—might help create a bigger picture of the nature of risks

As a conclusion, it became increasingly evident that the insurance industry indeed faces a new post-crisis reality. This will remain one of the major challenges for risk management in the future.

The M.O.R.E. 24 Seminar

24-25 June 2010, Bermuda

The M.O.R.E. Seminars are an integral part of The Geneva Association's Risk Management Programme and a key tool in the dialogue with other economic actors in order to emphasise the role of insurance in a modern service economy. They are completed by the Climate Risk and Insurance (CR+I) seminars, held annually on topics related to climate risk.

The M.O.R.E. 24 Seminar on Modelling and Mapping Risks (MMR) was organised in collaboration with, and sponsored by, William Fischer, CEO of Axis Re, on 24–25 June 2010, and held at the Bermuda Underwater Exploration Institute (BUEI), Hamilton, Bermuda. The seminar was attended by 44 experts from academia, insurance and government offices from Europe, North America and Bermuda.

The applications of MMR relevant to the insurance industry have rapidly developed since 1990, thanks to advances in computer sciences and the availability of dedicated software and super computers. MMR has an important role to play in the development of scenarios in many different areas, the M.O.R.E. 24 Seminar gave a first overview of MMR and their applications linked to the insurance industry and risk management, such as the development of scenarios in such fields as climate change (precipitation, temperature, average sea level rise), world population, national economies, populations, investment decisions.

The seminar was opened by William Fischer, who gave an overview of Bermuda as an international insurance centre, and Walter R. Stahel.

The first workshop looked at the history and future of modelling and mapping risk. Successes and failures were analysed by Rowan Douglas, CEO, Global Analytics, Willis Re, London; Gerhard Schmid, IRM, Munich Re presented Munich Re's Early Warning System of Emerging

Risks, based on the "background noise" of the Internet; and a future outlook in the form of a CAT model to write parametric insurance for the Caribbean Catastrophe Risk Insurance Facility (CCRIF) by Simon R. Young, CEO, Caribbean Risk Managers Ltd.

The second workshop focused on different streams and application domains of MMR. The Global Earthquake Model (GEM) was presented by Jay Guin, Senior Vice President, AIR Worldwide, Boston MA; Matthijs Kok, Head of Dutch flood research, HKV consultants, explained his work on flood modelling in case of breaking dykes; William Aspinall from Bristol University, U.K., gave his view of volcanic eruptions and the resulting hazards and risks in the air, at sea and on the ground, using data from the 2010 eruption of Eyjafjöll in Iceland. Finally, improved flood risk modelling using new accurate and homogenous elevation data from specially equipped airplanes was presented by Ivo Bánovský, Director of Risk Management Group, Intermap Technologies, based in Munich, Germany,

The second day was co-organised and chaired by Robert Muir-Wood, Senior Research Officer, RMS.

The third workshop looked at MMR applications related to climate change scenarios. A U.S. wildfire risk map was presented by Anthony Westerling, UC Merced; the projected sea level rise globally by Anthony Knap, President and CEO of the Bermuda Institute for Ocean Studies (BIOS). The topic of landslide risk modelling and climate change was analysed by David Petley from the Department of Geography, University of Durham, U.K.; and the topic of modelling for risk management with respect to climate change by Lewis Rothstein, Principal Scientist for WeatherPredict Consulting Inc. in Wakefield, U.S.

The final workshop gave an insight into a number of topics, such as the future modelling of terrorism by Gordon Woo, RMS, answered the question "Can modelling identify future outbreaks of liability claiming?", by Ryan Irvine of RAND, and "Mapping Risk for Investment Decisions in Power Networks", by Gary C. Stevens, CEO of GnoSys U.K. Ltd, at the University of Surrey, Guildford, U.K. William Hoskins from RMS gave the final presentation on "The expansion of risk modelling for longevity and excess mortality—including work in support of the analysis of longevity risk transfer bonds".

The M.O.R.E. 24 Seminar was the first event of The Geneva Association on the subject of MMR; the presentations have been published in *Etudes & Dossiers* N° 364, October 2010. In view of the success of this first MMR seminar, William Fischer has offered to host a second MMR Seminar in 2011 (M.O.R.E. 25, 12-13 July) which will again be sponsored by Axis Re in Bermuda.

Walter R. Stahel, Research Director, Risk Management, addresses the participants at the 2nd CC+I Seminar on "Climate Change: Opportunities for Latin American Insurers".

Matthias Meyer, Executive Director, Praximondo, discusses adaptation challenge in Latin America at the 2nd CC+I Seminar on "Climate Change: Opportunities for Latin American Insurers".

Insurance Economics

"…the theoretical and academic activities of The Geneva Association, aimed at stimulating research in areas linked to economics and insurance."

Christophe Courbage
Research Director, Insurance Economics

Insurance Economics

The Insurance Economics Research Programme aims to stimulate and support academic and professional research work related to insurance economics. Through creating networks, stimulating research and identifying strategic economic questions, it fosters progress in the understanding of insurance. It also organises and supports global and regional networks of insurance academics, researchers and theoretical experts.

The research programme on risk and insurance economics comprises the theoretical and academic activities of The Geneva Association. It is aimed at stimulating research in areas linked to economics and insurance. In this sense, it is dedicated:

- to making an original contribution to the progress of insurance through promoting studies of the interdependence between economics and insurance;
- to highlighting the importance of risk and insurance economics as part of the modern general economic theory;
- to detecting and defining special aims for research programmes in risk and insurance economics;
- to stimulating and supporting academic and professional research work in risk and insurance economics throughout the world; and,
- to diffusing knowledge and the results of research in risk and insurance economics worldwide.

The activities of the research programme are organised around various axes and networks.

Newsletters

Twice per year the research programme publishes the *Insurance Economics* newsletter. It contains information on conferences and publications in the field of insurance economics. Results of research grants and prizes offered by the Association are also published. Each issue of the newsletters includes an article reflecting research issues in insurance, such as insuring long-term care risks, D&O liability insurance, sovereign disaster risk financing, best practice in insurance models related to insurance, the role of statistics in insurance models, novel perspectives on risk classification. Finally, a section is devoted to the EGRIE activities.

Activities

European Group of Risk and Insurance Economists (EGRIE)

(www.egrie.org)

EGRIE is a Europe-based non-profit organisation devoted to promoting academic research on risk and insurance economics. EGRIE was founded by The Geneva Association in 1973 and has been supported by the Association since then. From its inception, a key activity of EGRIE has been the organisation of an annual seminar where academics from most European Universities gather. This seminar is considered to be one of the most prestigious academic meetings in risk and insurance economics worldwide. Each seminar starts with the Geneva Risk Economics Lecture which is given by a leading academic on key problems in insurance and risk economics. Past lecturers include Christian Gollier, Agnar Sandmo, John Campbell, Paul Embrechts, David Cummins, Kenneth Froot, Hans-Werner Sinn, John Pratt, Martin Hellwig, Michael Rotschild, and Joseph Stiglitz. The Geneva Risk and Insurance Review is today considered to be the official journal of EGRIE.

Insurance Economics

Since 2008, EGRIE has created two awards to support excellence in academic research, both funded by SCOR. The first one is the *SCOR-EGRIE Young Economist Best Paper Award* for the best paper presented by a young economist (under age 40) at the annual EGRIE Seminar. The second one is the *SCOR-Geneva Risk and Insurance Review Best Paper Award* for the best paper of the year published in *The Geneva Risk and Insurance Review*. For more information, visit the EGRIE website, *www.egrie.org*.

2010 SCOR/EGRIE Prize Winners

SCOR/EGRIE Young Economist Best Paper Award

The 2010 SCOR—EGRIE Prize for the best paper presented by a young economist at the annual seminar of the European Group of Risk and Insurance Economists (EGRIE)—as part of the 2nd World Risk and Insurance Economics Congress (WRIEC)—was awarded to Sara Arvidsson for her paper "Does Private Information Affect the Insurance Risk? Evidence from the Automobile Insurance Market". The amount offered to the laureate of the award is €2,000.

The selection committee is composed of five experts representing the following institutions: EGRIE, SCOR, Fondation du Risque, Institut d'Economie Industrielle (IDEI), and University of Paris-Dauphine.

SCOR/Geneva Risk and Insurance Review (GRIR) Best Paper Award

The 2010 SCOR/GRIR Award for the best paper of the year published in The Geneva Risk and Insurance Review was awarded to John Quiggin and Robert Chambers for their paper "Bargaining Power and Efficiency in Insurance Contracts", published in *The Geneva Risk and Insurance Review*, Vol. 34, Issue 1, June 2009. The amount offered to the laureate of the award is €1,000.

The selection committee is composed of the Editors and Associate Editors of The Geneva Risk and Insurance Review.

World Risk and Insurance Economics Congress (WRIEC)

(www.wriec.org)

Every five years the three leading academic societies in risk and insurance— the Asia Pacific Risk and Insurance Association (APRIA), the American Risk and Insurance Association (ARIA), the European Group of Risk and Insurance Economists (EGRIE)—along with The Geneva Association organise the World Risk and Insurance Economics Congress as part of their annual regional conference. The aim of the congress is to stimulate global awareness and interest in risk-related research and to provide a forum for networking among academics, industry and government professionals worldwide. The first WRIEC took place in Salt Lake City, Utah, in 2005 and was hosted by ARIA. The second WRIEC was held in Singapore on 25-29 July 2010 under the auspices of APRIA at the Singapore Management University campus. The next WRIEC will take place in Europe in 2015.

The World Congress provides limited financial aid to selected junior authors from developing economies whose papers are selected from the programme. Sponsors of the WRIEC include AXA, Munich Re, Swiss Re and Allianz. For more information on the second WRIEC, please see page 69 and the website, *www.wriec.org*.

Joint Seminar of the European Association of Law and Economics and The Geneva Association (EALE)

Since 1985, The European Association of Law Economics (EALE) and The Geneva Association have developed a close collaboration to promote the cross-fertilisation between law and economics in insurance research. Every two years, a joint seminar between EALE and The Geneva Association takes place in a European country. Fourteen seminars have been organised since the start of the initiative. A representative of EALE is also invited every two years to edit a

Summary of the 14th joint The Geneva Association/EALE Seminar
Innsbruck, 24-25 February 2011

The 14th Joint Seminar of The Geneva Association and EALE took place at the Leopold-Franzens-University in Innsbruck on 24-25 February 2011. The main topic of this Seminar was "Law and Economics of Natural Hazard Management in a Changing Climate".

The seminar dealt with a broad range of legal and economic analysis on risk assessment, risk mitigation and risk finance in catastrophe insurance and climate change. It also considered the role of governance, federal structures and recent legal initiatives at the European and member state level in this field. Keynotes were given by Paul Kleindorfer (INSEAD, Paris) and Jason Johnson (Virginia Law School, USA). Swenja Surminski (London School of Eonomics) discussed the new regulatory challenges for the insurance sector in the face of climate change, while Irina Zodrow and Silvia Llosa, both from the United Nations International Strategy for Disaster Reduction (UN-ISDR), stressed the importance of national legislation on disaster risk reduction for an effective climate change adaptation within the Cancun framework. Michael Faure and Klaus Heine (Erasmus School of Law, Rotterdam) discussed if insurance for systemic risk in the financial sector could learn from natural catastrophe insurance. Other contributions came from Jeroen van Aerts and Wouter Botzen on New York's flood risk management, Eva-Christina Petrescu on Rumania's newly introduced mandatory home insurance, and Donatella Porrini and Reimund Schwarze on the effectiveness of the various insurance models in Europe.

Moreover, young researchers from the University of Innsbruck's programme on "Environmental Economics and Regional Development" presented outcomes of their recent research. The seminar discussions were lively and demonstrated once again the importance and innovative potential of legal-economic reasoning for the development of insurance products and regulations. Participants, in closing, appreciated this opportunity to develop and intensify international collaboration in research of Natural Hazard Management.

half special issue of *The Geneva Papers on Risk and Insurance—Issues and Practice* dedicated to the seminar.

Topics of recent past seminars have included, "Law and economics of natural hazard management in a changing climate", "Insuring corporate liability risk", "Insurance, law and the environment" and "Risk classification and public policy".

Amsterdam Circle of Chief Economists (ACCE)

The ACCE was created in 1999 by The Geneva Association with the objective of bringing together a special group of insurance economists and strategists that can exchange ideas and visions. Each year, a seminar takes place in Amsterdam in early February under the auspices of ING, gathering insurance economists from The Geneva Association's members' companies. Topics of recent past meetings have included, "Insurance and the Post-Crisis Environment", "Insurance and the Credit Crisis", "Organising Risks in Insurance" and "The Insurance Value Chain". Thirteen seminars have been organised since the start of the initiative. See the next page for further information on the last meeting.

Prize, research grants, awards

In its role of promoting research in risks and insurance economics, The Geneva Association also awards a series of prizes and research grants every year.

The Ernst-Meyer Prize

The Ernst-Meyer Prize awards a university research work, mostly in the form of a doctoral thesis, which makes a significant and original contribution to the study of risk and insurance economics (worth CHF 5,000).

List of last Ernst-Meyer Prize Winners (for their PhD theses):

- Renaud Bourlès (2010), *Essays on the Stability of Mutual Insurance Agreements.*

Insurance Economics

> **Summary of the 13th ACCE Seminar**
> **Amsterdam, 17-18 February 2011**
>
> The annual meeting of ACCE, hosted by ING Group, brought together a special group of chief insurance economists and strategists from The Geneva Association members' companies to exchange ideas and views on currents strategic affairs in insurance. This year, the 13th ACCE meeting was to discuss "Insurance and the post Credit Crisis environment". The meeting was attended by about 20 participants, representing AIG, Assicurazioni Generali, BNP Paribas, Eureko, Fortis, the German Insurance Association, Hannover Re, IMSA, ING Group, the Insurance Information Institute, The Italian Insurance Association, Prudential Financial Inc., Swiss Re, and Tryg. Topics of sessions included: 1) Post-Crisis Environment and the Insurance Industry: A Global Picture of Impacts and Future Developments, 2) The Consequences of Sustained Low Interest Rates for the Insurance Industry, 3) Financial Stability and Insurance: Geneva Association Workstreams, 4) Rating Agencies and Regulation: The Insurance Industry between Scylla and Charybdis? and, 5) The Future of Guaranteed Products in (Life-) Insurance.
>
> The meeting concluded that the main challenges to come for insurance companies are the risk of inflation, the potential panic in the bond markets, and how to efficiently manage asset liability matching with more uncertain return expectations. It also came out from the presentations that the current economic environment of lower interest rates impacts the insurance industry and in particular reduces interest incomes of insurers. Indeed, unlike other industries that benefit from the current low interest rates via lower borrowing costs, the insurance industry is disadvantaged by falling investment yields. There is no benefit relating to funding costs since insurers are pre-funded by their clients' premiums. If non-life insurance may face lower profits, it hardly should show insolvencies. On the contrary, with very low interest rates for a long period, life insurance should face insolvencies but also should see consolidation as a result. Finally, the issue of longevity risk was stressed in the presentation about the pension system in the U.S. and a clear review was made of the features of the variable annuities with guarantees.

- James R. Thompson (2009), *Insurance and Credit Risk Transfer: A Study of Moral Hazard and Adverse Selection.*
- Nadine Verena Gatzert (2008), *Implicit Options in Life Insurance: Valuation and Risk Assessment* and Alexander Kling (2008) for a thesis on *Modellierung, Bewertung und Risikoanalyse von Zinsgarantien in konventionellen deutschen Lebensversicherungs-verträgen.*
- Wenan Fei (2007), *Secondary Risks in Insurance Markets* and Yijia Lin for a thesis entitled *Mortality Risk Management.*
- Bidénam Kambia-Chopin (2006), *Prevention of Risks, Insurance Markets and Environmental Liability: Essays on Incentive Theory.*
- Jörg Schiller (2005), *Insurance Fraud as an Economic Problem: A Contractual Approach.*
- Amy Finkelstein (2003), *Adverse Selection and Government Intervention in Life and Health Insurance Markets.*

Research grants and subsidies for theses

Each year The Geneva Association also awards two research grants for submissions, usually in the form of a doctoral thesis, carried out in the field of risk and insurance economics worth CHF 10,000. Topics of grants 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", "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.

Geneva Association/IIS Research Partnership Award

The Geneva Association and the International

Winners of The Geneva Association / IIS Research Awards

The organisers, The Geneva Association and the International Insurance Society (IIS), announce the winners of The Geneva Association/IIS Research Awards Partnership. Authors of each best-qualified papers win US$10,000 and were invited to present their work during the International Insurance Society's 46th Annual Seminar at the Hotel Meliá Castilla, Madrid, Spain, 6-9 June 2010. The two papers along with their abstracts are:

Management Strategies in Multi-Year Enterprise Risk Management, by Dorothea Diers (Provinzial NordWest Holding AG)

> *"In value and risk-based management, strategies should be selected in such a way as to fulfill the requirements on risk-capital coverage with economic capital (e.g. risk limitation) while achieving the highest possible return. One goal is to ensure effective risk diversification, which is hardly possible without the help of internal models. So, for example, management has to decide which strategy might improve the risk and return situation of a company if not enough risk capital is available—changing the asset allocation by lowering the part of high-risk investments, lowering risk via introduction of deductibles for the policy-holders in storm insurance policies, extending reinsurance cover, or any suitable combination of these or further strategies. Weapply a sample model based on empirical data to examine the effectiveness of different management strategies on a non-life insurer's performance indicators such as EVA and return on risk-adjusted capital. With the simulation study we want to encourage the use of multi-year internal models in strategic enterprise risk management and in the ORSA process, which will be required in the new regulatory framework of Solvency II."*

The aim of this paper is not only grounded in academic research, but also of high importance for insurance practice. The study wants to give a realistic and helpful idea of multi-year enterprise risk management processes for strategic management of different business segments, such as different lines of business, reinsurance, investments, where capital allocation plays an important role. Moreover the simulation study should give an idea of the ORSA process, which will be required in the new regulatory framework of Solvency II. In addition to practitioners, regulators will also benefit from this paper's results. Since the "use test" will play an important role for the approval of internal models, regulators will check if the internal model is used as a base for management decisions in enterprise risk management and in the ORSA process, whereby both should be based on a time horizon of several years.

Insurance, Systemic Risk and the Financial Crisis, by Faisal Baluch (Commerzbank), Stanley Mutenga (Cass Business School), and Chris Parsons (Cass Business School)

> *"In this paper we aim to provide a comprehensive assessment of the impact of the recent financial crisis on insurance markets and the role of the insurance industry in the crisis itself. We begin by examining some previous 'insurance crises', noting that there has never been an 'insurance crunch' which parallels the credit crunch that led to the financial crisis and subsequent world recession. We then go on to consider the effect of the crisis on insurance risk – the liabilities arising from contracts which insurers underwrite. We discuss the effects of the crisis on the demand for insurance and on claimant behaviour, identify the lines of insurance which have been most affected by the crisis and attempt to quantify the effect on insurers that write these lines. We then move on to analyse the effects of the crisis on the performance of insurers in different markets sectors (e.g. life and non-life) and in different world markets. We also compare the performance of insurers with that of banks in the same period. We then turn to the question of systemic risk in insurance, which we define in two ways. We aim to assess the extent of systemic risk in insurance and examine the channels through which systemic risk can be transmitted to insurance markets, including the development by insurers of capital markets products, bancassurance activity, participation in structured finance and the trading of risk through reinsurance and retrocession. We conclude that, while systemic risk remains lower in insurance than in the banking sector, it is not negligible and has grown significantly in recent years, partly as consequence of insurers' increasing links with banks and their recent focus on non-(traditional) insurance activities, including structured finance. We conclude by considering the structural changes in the insurance industry which are likely to result from the crisis, including possible effects on 'bancassurance' activity, and offer some thoughts on changes in the regulation of insurance markets which might benefit insurance markets and limit the effects of any future crisis on them."*

Insurance Society (IIS) Research Partnership Award is designed to foster original, practically-oriented applied research in insurance. The award is aimed at research that addresses issues of concern to global insurance leaders and which directly influences business operations on a practical level. The winning research is presented in a seminar at the annual IIS meeting—in 2011 this will be in Toronto, Canada, 19-22 June 2011. The research is published in a special edition of *The Geneva Papers on Risk and Insurance —Issues and Practice* and distributed by The Geneva Association and the IIS. Awards of up to US$10,000 are presented to the winning researcher.

2nd World Risk and Insurance Economics Congress
25-29 July 2010, Singapore

The World Risk and Insurance Economics Congress (WRIEC) that took place in Singapore, 25-29 July 2010, was the second joint meeting organised by The Geneva Association, EGRIE, ARIA and APRIA.

With 345 participants from 35 countries, the Congress was organised around both plenary and concurrent sessions. The plenary sessions dealt with the issues of regulation and supervision, the credit crisis and its aftermath, risk management of man-made catastrophes and natural disasters, ageing and pensions, risk management and insurance education and its pedagogical issues. During the concurrent sessions, over 200 academic papers were presented, which covered almost the full scope of topics on risk and insurance. Groundbreaking meetings and conferences such as the ones of the WRIEC are paramount in stimulating global awareness and interest in risk-related research, as well as ensuring constructive discussions and sharing ideas between both academia and industry.

Financial Crisis and Market Regulation

Peter Braumüller, the current President of the International Association of Insurance Supervisors (IAIS) had the hard task of delivering the opening lecture at a time when both governments and populations are questioning the existing regulation of the insurance industry and the way it is enforced. He first stressed that the complex interactions in the financial markets worldwide were not a recent discovery, but that clearly the swift contagion that spread throughout the system as a result of the subprime crisis had caught most players off guard. Furthermore, massive governmental interventions to save banks and financial institutions will be a heavy long-term burden to bear.

Even if the insurance industry only suffers from collateral damage from the financial crisis that it neither created nor fuelled, it is still seen by political leaders as a part of the "financial world" and thus lumped in as part of the problem when it is really more part of the solution. However, the pressure put on insurance supervisors worldwide provides an opportunity to draw the lessons from recent events and refine the existing tools.

In his conclusion, in spite of the challenges ahead to be met, the President of the IAIS remains confident that if all stakeholders work together to control financial risks more efficiently, they will succeed; this prospect will be enhanced by a joint brainstorming and research of academics, insurance industry leaders and supervisors for the continuous improvement of control methodologies adapted to the evolving activities of the insurers and reinsurers.

Longevity Risk

Olivia S. Mitchell, Professor at the Wharton School of Finance, was in charge of framing the debate for the ensuing discussion on longevity. First of all it is necessary to define what is meant by the "risk of longevity"; individually, the first step is to envision a long life as an opportunity; the second step is to realise that it requires income to live and at the societal level it can be seen as a threat or at least as an additional cost. Hence, the following definition is generally accepted: "Longevity risk is the risk that individuals live much longer that their life expectancy".

(cont'd)

This has many consequences on annuities to be paid out, on pensions, and even on healthcare costs. It is to be noted that this individual risk is transferred to a large extent to society through the social protection system in countries where healthcare is essentially public and the pension fund organised as repartition systems, rather than capitalisation.

Guy Coughlan from JP Morgan labelled the market for the transfer of the longevity risk an emergency issue both for insurers, an opportunity to exploit cautiously, and, for the pension funds, a threat to be contained. The volumes involved are of such magnitude that the emergence of financial market instruments to transfer such risk is inevitable. The current members of the LLMA—Life and Longevity Markets Association—are essentially insurance companies and pension funds. The mission the founding member assigned to it is to promote and facilitate the creation of a liquid market to cover the risks of longevity and mortality. The not-for-profit association was operational only recently, in February 2010. Therefore, it is far too soon to assess its real impact but it already counts among its members the major global players in the field.

Singapore Central Provident Fund's CEO, Liew Heng San, stressed the specific challenges the city State has to overcome in view of its rapidly ageing population due to the success of its healthcare policy and life style evolution. This is why, after studying the existing models, the Singapore Government had to design its own innovative solutions, all the while keeping in mind the core principles for a sound insurance system. In summary, to accompany its citizens "from cradle to grave", Singapore has established the three pillars of wisdom: financial sustainability, structured incentives and financial literacy. Education of all citizens on the constraint of finances to learn to manage domestic finance together with raising the age of retirement to 67 really is the cornerstone that all developed countries should learn from!

Catastrophic Risks and Security

Volker Deville, Executive Vice-President of Allianz, identified four classes of major risks or threats which are: natural risks, biometric risks, economic risks, and civilisation risks:

Men have always strived for security in these identified threats, even from the time when they lived in caves, and there are three typical classes of actions:

- Immediate local action: This would be regrouped under the general term of disaster recovery and is the assistance delivered by the parties at the time of the event (depending on the nature of the event: firemen, emergency healthcare, police, assistance, etc.).
- Global swift action: All the actions undergone to modify the operations of the environment in the short run (depending on the nature of the event: insurers, central banks, armies, lawyers, judges, etc.).
- Global differed action: All the actions undergone to modify the structure of the environment in the long run (depending on the nature of the event: governments, legislative bodies, insurers, investors, the scientific community, etc.).

Practically, the insurance community is the only stakeholder involved in all three classes. Therefore, the deficit of recognition it suffers from, especially when compared to firemen, is not surprising. Insurers are clearly essential to the resilience of communities and the social fabric. This is an acute problem at a time when most players in security issues identified here suffer from some form of mistrust from the public.

Mr Deville also touched upon the trust deficit the industry suffers:

- Insurance must develop effective responses to the mega-catastrophes.
- Insurance should cooperate more actively with the academic and research community and not hesitate to advise the governments when appropriate.
- Insurance must offer more direct actions in the field of prevention or protection of all sorts of threats to strengthen individual and collective resilience.

Climate Change and Discount Rate

Professor Christian Gollier, who was selected to deliver the high point of the Congress, the 2010 Geneva Risk Economics Lecture, chose a theme on which he has been working for several years in connection with public endeavours in France, namely: "The Economics of Uncertain Climate Change: The problem of the discount rate".

(cont'd)

With a present value approach to making financial decisions, the discount rate is a key driver: if the rate is too high, the long-term cash flows have no impact on the decision criteria, the net present value and, therefore, you really make a decision on the short-/medium-term impact (with a 15 per cent rate, cash flows beyond 15 years have practically no impact on the decision); on the other hand when choosing a rate close to zero, the time value of money is not really incorporated in the decision process and current generations are sacrificed on the altar of an uncertain bright horizon for upcoming generations, beyond the foreseeable future. In practice, the discount rate has a direct impact on decisions made today that have long-term consequences. This is particularly true of national government decisions that may impact not only the country, but even the region, such as decisions made by Member States of the European Union, but that is another matter. How would 27 States at very different levels of development agree on a long-term rate? This is a delicate question to which Christian Gollier tried to provide insights.

A related issue is to decide whether it would be "socially efficient" to reduce the discount rate when making long-term decisions, with an approximate horizon of more than 30 years. This would relatively favour the distant future in the short run. A potential argument is that more distant futures are more uncertain. In the same way, serial correlations in growth rates are important in growth rate that magnify the long-term uncertainty, and lead to a structure by horizon with a decreasing discount rate.

Higher Education in Risk and Insurance

At a time when all universities, be they public or private, see their sources of funds dwindling, they are tightening budgets and all departments fight for their share through increased enrolment. Presidents and Deans have to make tough choices and they invest in promising segments. In such a context, academics, researchers as well as faculty are hard pressed to find ways to attract droves of students. Clearly, this lingering issue could not be out of the WRIEC agenda and the last plenary session was the stage of a round table in which the leaders of all three academic associations and The Geneva Association were called upon to describe the current situation in their area and propose solutions to increase the attractiveness of courses and majoring in risk and insurance in their respective universities.

The presentations clearly illustrated the major differences between the American approach that also inspired the Asian developments over the last decade and the European approach. In Europe, the community is more oriented towards macro-economics and modelling based on high-level mathematics, and they are a part of Economics departments, studying the economics of uncertainty, except for those really specialised in insurance; the insurance institutes tend to be within law departments in universities. In the U.S., departments are rarely self-sufficient and are housed mostly in finance departments of business schools and conduct empirical research based on data from the industry, a strong sponsor of such professional research and education.

It is all too clear that most Anglo-Saxons remain very "insurance-oriented", whereas the French and German schools are more in the line of Pigou and other Nobel Prizes of Economics. However, both suffer from a discrepancy between their fields of expertise and the expectations of the risk owners and professionals of risk management, be they in private or public organisations. They are looking for specific competencies that will make them efficient risk managers as they are called by the now international standard ISO 31000:2009.

Conclusions

The success of the Congress was apparent from comments by the four organisers. Not only were the organisers delighted by the attendance and quality of conference, but so also were the many academics, practitioners and other participants; they gave complimentary feedback on a variety of subjects, including the sizeable international participation, and the way that the various sessions were set up to facilitate the sharing of risk and insurance knowledge. However, more than the sheer diversity in attendance, what really struck Vickie Bajtelsmit, ARIA's President at the time of the Congress, was the creation of common ground between the business and academic worlds. Patrick M. Liedtke, from The Geneva Association, highlighted the bridge that the congress created between academia and practitioners. William H. Rabel and W. Jean Kwon, both from APRIA's Board, pointed out that university curricula on risk and insurance got an high-quality showcase and that scholars were able to see what was important to the business world. EGRIE emphasised the worldwide cooperation that took place at the Congress and is already looking forward to the 3rd World Risk and Insurance Economic Congress in Europe in 2015.

Health and Ageing

"…aims to investigate the role of demographics, new technologies and insurance in the management of health risks in society."

Christophe Courbage,
Research Director, Health and Ageing

Health and Ageing

Change in demographics, society and health technology affects the sustainability of welfare systems and other health financing institutions. The Geneva Association's Health and Ageing Programme is focused on better understanding these changing dynamics for health provision and their implications for insurers in managing health and longevity risks.

The Health and Ageing Research Programme of The Geneva Association aims to investigate the role of demographics, new technologies and insurance in the management of health risk in society. It seeks to bring together analyses, studies and researches related to issues in health provision and the role of insurance in covering health risks, with an emphasis on the changing demographic structure whereby the population over 60 years old largely exceeds that of other groups. The key is to test new and promising ideas, linking them to related works and initiatives in the health sector and to try to find solutions for the future financing of healthcare.

We are particularly interested in the following topics:

- the impact of an ageing population on health insurance systems;
- the development of insurance mechanisms for covering long-term care risks;
- the effect of technology on health insurance;
- the development of healthcare systems and the capitalisation issue;
- the interaction of public and private systems in health provision; and
- health issues for an ageing population in the workplace.

To pursue these goals the research programme relies on various activities, in particular the development of research within the scope of the programme, the organisation of the Health and Ageing conference series and the publication of various materials, including a special issue on health of *The Geneva Papers on Risk and Insurance—Issues and Practice* every two years and the publication of books and newsletters.

The two main activities of 2010/11 were the organisation of the 7th Health and Ageing Conference on "U.S. and French Long-Term Care Insurance Markets Development" on 18-19 November 2010 in Paris, co-organised with Willis Re. This conference gathered more than 50 experts with speakers coming from international organisations, the insurance industry, universities and government agencies. The second important activity was the publication of a special issue on health of *The Geneva Papers on Risk and Insurance—Issues and Practice*.

In 2010/11, the research programme will undertake two major activities. The first activity will be the organisation of the 8th Health and Ageing Conference on "Insurance and Dementia Diseases". The aim of the conference is to understand better the nature of dementia, its future cost and how insurance can help covering this risk. The second activity will be the co-editing of a book with Joan Costa-Font of the London School of Economics on the financing of long-term care in Europe—institutions, markets and models, to be published by Palgrave Macmillan in the second half of 2011. This book will draw on the various meetings The Geneva Association has organised on the topic of long-term care. It will address the different forms of long-term care financing, whether public or private coverage, insurance markets, and the role of the family and housing as self-insurance for long-term care.

Health and Ageing

Special issue on health of *The Geneva Papers on Risk and Insurance—Issues and Practice,* vol. 35(4), October 2010, edited by Christophe Courbage

Through eight articles by various experts this special volume contributes to the research programme by addressing four important issues: the concept of risk classification in health insurance; the link between insurance and health expenditures; the development of long-term care insurance and finally the relationship between retirement and health.

Many countries have chosen to implement health plan competition as a means of creating incentives to be cost-conscious, while preserving quality, innovation and responsiveness to consumer preferences. Risk equalisation or risk adjustment is an important mechanism for attenuating problems that threaten the effectiveness of such strategies for resource allocation in healthcare. Risk equalisation means using information to calculate the expected health expenditures of individuals and setting subsidies for consumers or health plans to improve efficiency and equity. Without adequate risk adjustment, competing health plans have incentives to avoid individuals with predictable losses and to select predictably profitable members. This selection and the resulting risk segmentation can have adverse effects in terms of access to care, quality of care and efficiency in the production of care. This volume starts with two papers dealing with this issue. The paper by Richard van Kleef, Konstantin Beck and Florian Buchner stems from the important goal of risk-adjusted capitation payments (where subsidies are adjusted for risk characteristics) to competitive community-rated health plans (where health plans are not allowed to differentiate their premiums according to individuals' risk characteristics). While, in most schemes, risk-adjusted capitation payments are simply based on the average observed costs in risk groups (in a prior year), the authors show that under this procedure, incentives for efficiency will not always be maintained. John Armstrong and Francesco Paolucci address the issue of risk equalisation in the special case of Australia and Ireland. They carry out a simulation exercise to compare the effectiveness of the two countries' risk equalisation schemes in meeting the policy objectives of encouraging insurers to be efficient and discouraging them from engaging in risk selection.

A second series of papers focuses on the important link between health insurance and healthcare expenditures. While insurance, whether public or private, is crucial in covering the financial consequences of illness and in giving access to care, it can also lead to opportunistic behaviour in various aspects, making health risks more expensive and difficult to cover. Baoping Shang and Dana Goldman address one of these aspects in the U.S. public health system for the elderly: Medicare. David Bernstein also looks at the U.S. case by simulating the impact of reinsurance on insured healthcare expenditures for different cohorts. Gholamreza Keshavarz Haddad aims at estimating a demand model for health insurance and medical care in Iran, in the presence of heterogeneous and latent health status of individuals. Finally Xiong Linping, Zhang Lulu, Tang Weidong and Liu Hong conclude this section by focusing on the health scheme in China. Their conclusion advances the understanding and impact of health insurance reform in China, and also assists in future policy formulation and implementation.

The two last papers of this special issue focus, through two different aspects, on the consequences of the changing demographic structure, whereby the population over 60 largely exceeds that of other groups. Such a demographic trend has consequences on the ways that both long-term care coverage and pensions are organised. Andy Zuchandke, Sebastian Reddemann, Simone Krummaker and J.-Matthias Graf von der Schulenburg deal with the effect of the introduction of the compulsory long-term care insurance in Germany in 1995 on the perception of financial security when needing long-term care. They show that the introduction of this scheme led to a generally positive shift of the assessment of long-term care risk. Jennifer Roberts, Nigel Rice and Andrew Jones conclude this volume with the role of health in explaining the decision to retire early. Their results show that health is a key determinant, and its effect is large compared to that of other variables, including the type of pension an individual has access to.

This set of papers contributes to the main aim of *The Geneva Papers on Risk and Insurance—Issues and Practice*, which is to improve the scientific knowledge of insurance and to offer a rigorous forum for exchanging ideas among concerned parties. These contributions illustrated in the light of various countries provide some important messages for policy-makers on how best to plan the financing and the organisation of health systems, and on the role of insurance mechanisms, whether public and private, in covering health risks.

Health and Ageing

The Health and Ageing Conferences

7th Health and Ageing Conference
Paris, 18-19 November 2010

On 18-19 November 2010, the 7th Health and Ageing Conference of The Geneva Association took place in Paris, France. The conference was co-organised with Willis Re and addressed the topic of "U.S. and French Long-Term Care Insurance Market Development". More than 50 participants from various countries and coming from insurance and re-insurance companies, international organisations, universities, research centres, and governmental agencies attended the conference.

The purpose of the conference was to compare the U.S. and French situations in terms of long-term care (LTC) risks financing, focusing on insurance mechanisms. Indeed these two countries have the two most developed LTC insurance markets. Whilst they differ in various respects, both are or will be impacted by new reform proposals. The objective of the conference was to better understand the differences and similarities of these two major long-term care funding approaches. In particular, the conference addressed the respective epidemiological LTC profiles and risk factors, LTC insurance markets and products, the actuarial and risk monitoring issues, and the public LTC reforms to be implemented, in both the U.S. and France.

This conference proved to be very successful and it undeniably offered a broad view of the issues at stake in both countries. Experience of these two models of LTC funding can be useful to other countries and help them to better manage the financing of their LTC risks.

8th Health and Ageing Conference on "Insurance and Dementia Diseases"
Toronto, 14-15 November 2011 , co-organised with Sun Life Financial

Dementia is a progressive, degenerative condition that affects memory, thinking, behaviour, emotion and day-to-day functioning. As dementia prevalence increases with age, dementia is becoming one the greatest challenges facing our ageing societies. In 2010, an estimated 35.6 million people were living worldwide with dementia. This number is expected to increase to 65.7 million in 2030 and may reach 115.4 million by 2050. Unfortunately there is no curative treatment for dementia and there exist very few factors for prevention to decrease its onset. The ability to care for people with dementia depends on a mix of formal and informal caregiving. Support for people with dementia can be both tiring and stressful—physically, emotionally and financially. Many countries may not be well prepared to provide quality health and care services for people with dementia and their family caregivers.

Dementia has the potential of a devastating impact on public health systems because dementia is among the most disabling of all chronic diseases. How this trend translates in terms of costs in public health will vary greatly depending on the country and what mix of care is provided.

Insurance can help covering the risks linked to dementia and various products are already offered on the market, either via health insurance or long-term care insurance. Insurance can also play a role in developing the care for demented people, either by integrating care services into their benefit or by investing in nursing care centres or other specialised institutions.

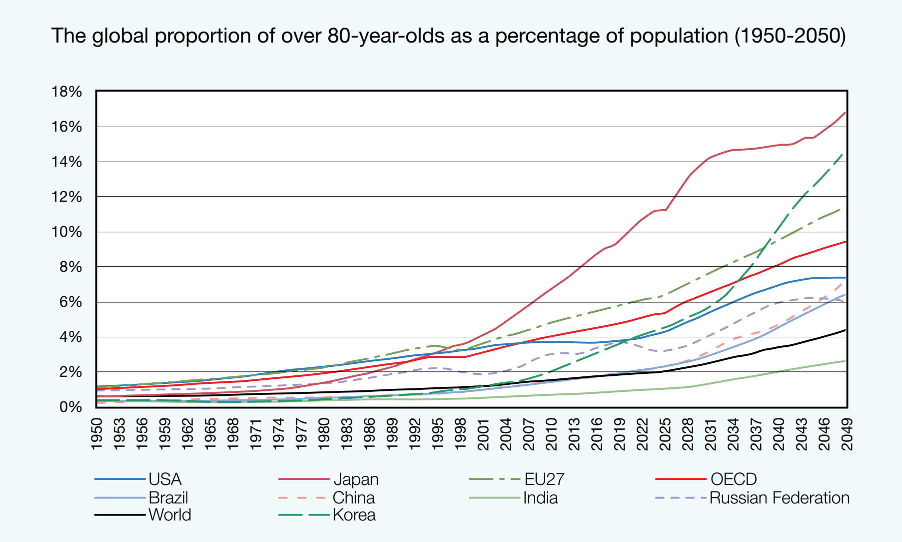
The aim of the conference is to understand better the nature of dementia, its future cost and how insurance can help covering this risk. The conference will be organised around various sessions, amongst which the epidemiology of dementia and risk profiles, care and cures for dementia, financing and organising the coverage of dementia, insurability of dementia and insurance market.

Health and Ageing

Financing Long-Term Care in Europe: Institutions, Markets and Models
Edited by Joan Costa-Font and Christophe Courbage
Palgrave Macmilan, scheduled for Autumn 2011

The ageing of European populations brings new financial risks that call for state, market and societal responses. In 2011, the first baby-boom generation is turning 65, and forecasts predict that the size of old-age population in need of long-term care will double in the next 50 years in Europe. However, how different countries are responding to the challenge of financing long-term care is still a question open to further examination, including the role of market development, the changing intergenerational contracts and especially the constraints of State intervention.

Growing long-term care needs in several European countries as well as the reshaping of traditional modes of care giving further increase the pressure for sustainable funding of more comprehensive long-term care systems. The book examines different forms of partnership and potential cooperation of State, market and societal stakeholders.



Source: *OECD Labour Force and Demographic Database*, 2009.

This book, through 16 chapters, not only offers a full understanding of the institutional responses and mechanisms in place to finance old age but also provides a deep analysis of both demand and supply factors underpinning the development of financial instruments to cover long-term care needs in Europe. It also illustrates through various case studies how long-term care in Europe is financed and the main challenges these countries face in term of long-term care management.

The Four Pillars/ Pensions

"…identifying possible solutions to the problem of the future financing of pensions and, more generally, of social security in our post-industrial societies."

The Four Pillars/Pensions

The Geneva Association Research Programme on Social Security, Insurance and Retirement derives its name—The Four Pillars—from a visionary proposal that uses part-time work for those at retirement age to solve a myriad of problems that exist with retirement, its financing and how it affects individuals, companies and the wider economy. Insurance solutions play a key role for providing old-age security and constitute huge future potential.

In 1987, The Geneva Association launched its "Four Pillars" Research Programme with the aim of identifying possible solutions to the problem of the future financing of pensions and, more generally, of social security in our post-industrial societies. It saw in demographic trends—particularly increased life expectancy—not the catastrophe many feared, but a positive and formidable challenge for our communities and firms and for the workforce within them. This challenge meant re-thinking retirement in the context of a new design for employment throughout the life cycle so that people, rather than being relegated to a role of inactive consumers, could work later in life, remain socially integrated and continue to make a valid economic contribution to our service economies. The Programme has been well recognised by national, European and international organisations.

The concept of the Four Pillars owes its origin to the fact that, in most countries, the funding of pensions is based on three pillars:

- the first pillar—the compulsory, pay-as-you-go, State pension;
- the second pillar—the supplementary (often funded-based) occupational pension; and,
- the third pillar—individual savings (including personal pensions, life insurance and other assets).

In our publications and seminars, we have advocated the adaptation of the first pillar, a strengthening of the second pillar and further development of third pillar resources. However, our attention has focused above all on a fourth pillar, i.e. the future need for a flexible extension of worklife, mainly on a part-time basis, in order to supplement income from the three existing pillars. The reorganisation of end-of-career and the new age-management strategy—in which gradual retirement is destined to play a key role—involved in establishing this pillar, also correspond to many of the changes (for example in quality of work and the life cycle) that are specific to our contemporary service economies.

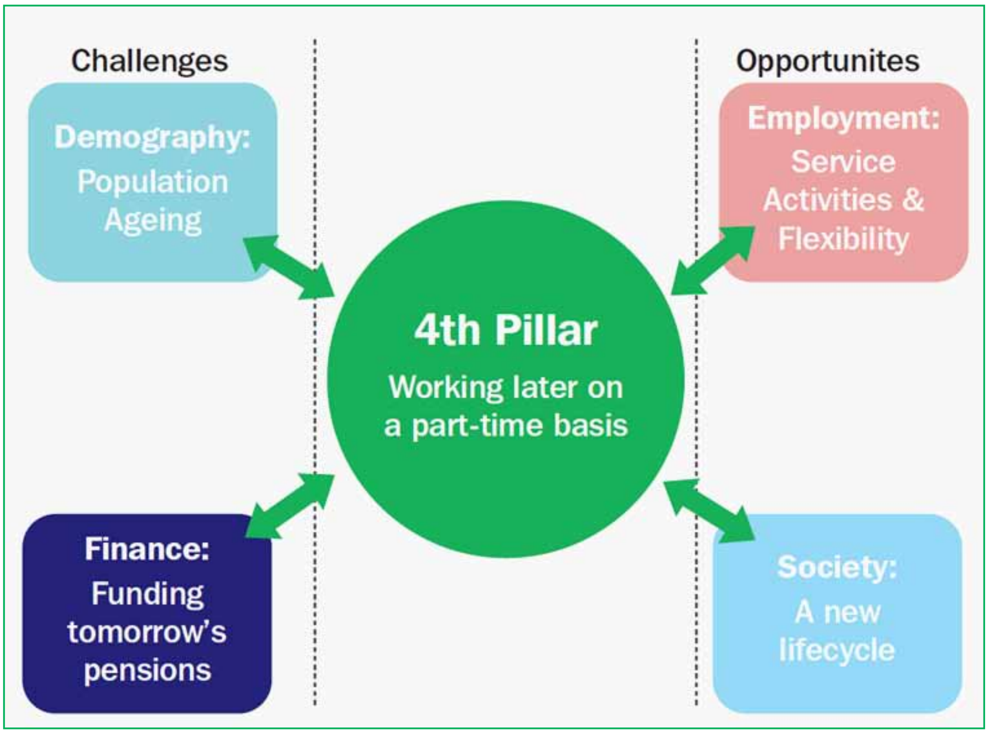
The research programme has had four main objectives:

1. Analysis of the key elements in organising old-age security systems;
2. Research of conditions for multi-pillar systems of pension financing, in particular the second pillar based on funding, the third pillar based on savings and life insurance and a new proposed fourth pillar based on income from a much needed extension of working life;
3. Encouragement of multiple and complementary solutions to the challenges of ageing; and,
4. Understanding the role of insurance in the provision of old-age security systems.

There are five key issues that are of interest and/or relevance to the insurance sector:

1. **A global partnership between public and private sectors.** As welfare systems begin to crumble under the weight of our increasingly numerous and expensive elderly population,

Societal challenges—Opportunities from a fourth pillar

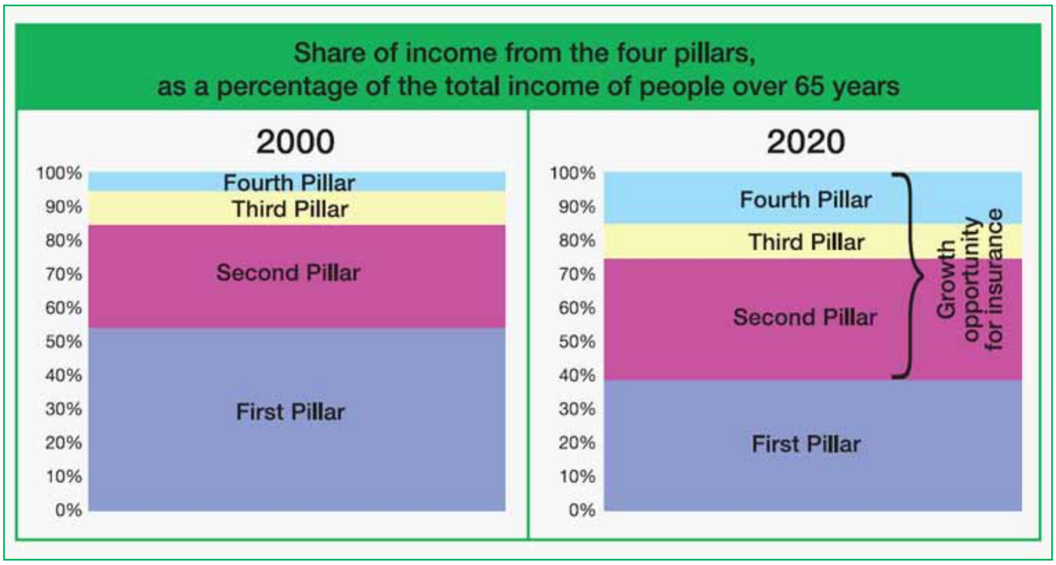


a key challenge has been to consolidate the partnership between the public and private sectors. Almost all countries have had to redesign or readjust their welfare policies on health and pensions so as to avoid creating public deficits which would otherwise place too great a burden upon future generations. The developments and potential outcomes of this changing relationship are very pertinent to insurers as a key counterparty in the private sector.

2. **Development of second and third pillar pensions.** With recent and current reforms of public pensions aimed at future funding—involving, inevitably, a fall in the relative value of old-age benefits—the development of second and third pillar pensions has become a priority. In many countries, second-pillar pensions have been made compulsory and, where not already compulsory, have been encouraged by all kinds of financial and fiscal incentives. Private pension funds will play a growing role in securing future retirement income.
3. **Research into the extension of working life, i.e. of a fourth pillar.** Even substantial development of second- and third-pillar pensions will probably not be sufficient to compensate both longer life expectancy and a rising proportion of people over 65. With good health expectancy it is not only possible, but also essential to plan for a flexible extension of one's working life. Pension solutions must encourage and facilitate this extension, which will also benefit the insurance sector workforce.
4. **Encouragement of global savings and life insurance.** In a more general way, it is essential to encourage long-term savings for retirement and longer life expectancy.

The Four Pillars/Pensions

Evolution of the share of income from the four pillars



Insurance companies have a key role in designing adequate and tailored products to cater to a wide range of needs and means.

5. **Age management of the workforce of insurance companies.** In insurance, as in other sectors of the economy, workforce ageing will require planning for improved age management as a matter of urgency. Our studies at the European and international levels have shown that, among other things, continuing training, work-time reduction, job redesign and a review of the seniority-pay principle, will increasingly need to be addressed by businesses. Codes of employment might be an ideal place to start developing new age management strategies. Insurance would be well served by being seen to lead in this important field in the future.

The Silver Workers Institute

www.silverworkers.ch

The aim of the Silver Workers Institute (SWI) is to study the work environment as well as motivations of seniors and to propose policy action—for companies and governments. Based on the findings of both the decades of research on the Four Pillars, formerly directed by Geneviève Reday-Mulvey, the work of Orio Giarini and Patrick M. Liedtke, as well as the Silver Workers Study, SWI members have presented at a variety of international conferences in 2010.

One of the presentations given by SWI members was the symposium "Hoffnung Alter—Perspektiven auf Arbeit im aktiven Alter", held as part of the 2nd joint Congress of Deutsche Gesellschaft für Gerontologie und Geriatrie and of Schweizerische Gesellschaft für Gerontologie, as well as the 10th Congress of Deutsche Gesellschaft für Gerontologie und Geriatrie, Virchow Klinikum der Charité Berlin, in Berlin, in September 2010. The symposium brought together researchers from several universities in Germany and the United States as well as representatives from the German Federal Institute of Population Research.

Also in September, the SWI members discussed the labour market and Silver Workers in a symposium on age and work at the 47th Congress of Deutsche Gesellschaft für Psychologie, in Bremen. In December, in Los Angeles, California, the SWI members organised a very well received Silver Workers Institute Session at the occasion of the 3rd National Conference on Positive Aging.

Silver Work was also promoted at several project meetings with the German Federal Institute of Population Research in Wiesbaden, and at Victoria University of Wellington, through a presentation and discussions.

At a meeting at RAND Center for the Study of Aging, Santa Monica (CA), Jürgen Deller, Research Director of the Institute, as well as Professor for Business Psychology at Leuphana University in Lünenburg, Germany looked at identifying fields of joint interest with Michael Hurd, Director, and Susann Rohwedder, Associate Director, RAND. They also discussed research cooperation initiatives at the Business School of California State University Long Beach.

At a meeting in December with Ken Shultz, CSU San Bernardino, a leading U.S. expert on bridge employment, in Santa Monica, Dr Shultz expressed his intention to publish with authors of the SWI. A concept for an international scientific symposium on work in retirement in Germany in 2013 was also discussed.

Media coverage was pursued throughout 2010 and early 2011. Two outstanding events were live TV interviews with Jürgen Deller on Silver Work on NDR TV as part of Susanne Stichler's live format "Menschen und Schlagzeilen". While the journalist in the 10 March 2010 interview was very skeptical of Silver Work, the attitude had changed in the 15 September 2010 interview covering the story of an employee who refuses to retire.

Together with two more university partners, Jacobs University Bremen and SRH University, Berlin, a longitudinal study proposal on Silver Work was prepared. This project will be supported by a letter of cooperation between the Federal Institute and Leuphana University. By offering close cooperation in PhD theses, SWI will be prominently placed as authorship affiliations on various publications that will be the basis of several cumulative dissertations, if this offer is being accepted.

The SWI also completed a project with Germany's Senior Expert Service (SES) as part of Leena Maxin's dissertation on "Volunteering in retirement: Motivation and design of use of Senior Expert Service", published in *Zeitschrift für Gerontologie und Geriatrie*. Leena Maxin is a Research Fellow at the Silver Workers Institute. As part of this project, a press conference was hosted by SES on 5 November 2010, in Bonn. National public radio Deutschlandfunk broadcasted an interview with both Jüurgen Deller and Ms Maxin. There was much relay of the information in national print media.

Papers and conference proceedings have been published in different scientific journals, including two invited articles on Silver Work.

Additional information stemming from previous research work in the Four Pillars programme is being included in the SWI website, on the following topics:

- Demography;
- Pensions and Pension Reforms;
- Employment and Age;
- Social Security;
- Retirement/Health/Social Patterns;
- Legislation;
- International Issues; and,
- European Union.

Future plans for the Silver Worker's Institute

Anne Marit Wöhrmann, a new PhD student financed by Jürgen Deller's chair, is about to research the case of a Bremen-based subsidiary of EADS, Europe's largest aerospace corporation, who employs several working retirees. This should champion the cause of Silver Work yet further.

Further plans include participation in both European and North American workshops and international conferences. The SWI would like to interconnect with NETSPAR, a Dutch initiative in the field of Silver Work.

In August 2011, Jürgen Deller will attend the annual meeting of the Retirement Research Consortium at the National Press Club in Washington, DC. This consortium includes the University of Michigan Retirement Research Center, the Center for Retirement Research at Boston College, the NBER Retirement Research Center, as well as the Social Security Administration of the United States.

Research in the field of Silver Work through the SWI will also continue actively, namely through two papers submitted to the 15th Conference of the European Association of Work and Organizational Psychology, that will take place in Maastricht, The Netherlands, on 25-28 May 2011.

Pension Systems in the Future

Although the financial crisis has brought other issues to the fore of policy-makers' attention, like safeguarding the financial system against possible collapse, recapitalising the banks and avoiding the worst in a crippling sovereign debt crisis in several countries, a looming long-term challenge cannot be forgotten: old-age security. For many years, we have known that the demographic developments in most developed nations—and indeed in some developing ones such as China—is not conducive to the stability of our old-age security systems. Governments have tried to counter this by implementing several reforms, altering benefit levels, increasing contributions, tinkering with retirement ages and trying to change or introduce some technical elements that would lessen the burden on public (and sometimes private) pension schemes.

Old-age dependency ratios

Often the fertility development is mentioned as a key driver of problems and while it is very important, old-age dependency ratios will rise not only in function of a falling fertility but as a consequence of a high and continuing increase in the life expectancy for people over the age of 60. This trend, which is projected for almost all countries around the world, is a very positive one for the people benefiting from it. However, it will have adverse consequences for old-age security systems if they remain structured in the same way as they are today. The traditional approach would call for higher rates of economic growth to reduce the extent of sacrifice necessary to keep social security systems in balance and prevent budget deficits in the affected countries. The proponents of this solution want to enact labour, commercial, fiscal, and trade policies that promote economic efficiency, and therefore stimulate growth, so that any social guarantees to the aged become more affordable. However, there are limits to this approach and as recent experience with global economic growth shows, it seems even impossible to maintain in the future the same growth rates that the world experienced over the past decades.

The policy response has therefore been in several countries to increase retirement ages. This has of course a direct effect on the old-age dependency ratio. It is a peculiarity of our current pension systems that the retirement age remains basically fixed (which has been a politically highly sensitive issue to address almost everywhere) while any additional gain in life expectancy is translated directly into a prolongation of retirement. An increase in retirement age would allocate some of the gain in life expectancy to the active period, thus in one swoop lowering the old-age dependency ratio and reducing the burden of payouts while at the same time increasing the number of contributors and so their payments into the system.

Participation rates of the elderly

This technical approach is certainly effective and economically correct. Unfortunately, it often leaves the single most important factor out of the equation: the motivational element of the group of people aged between 60 and 80 years, i.e. their desire to participate in the economic system. What is generally proposed is a prolongation of working life in much the same way as it is organised for younger persons. However, we know from our research and that carried out by such organisations as the Silver Workers Institute (see *www.silverworkers.ch*) that the factors that motivate older persons to remain active for longer are different from those that encourage younger ones. Financial aspects gradually play less of a role, while the flexibility of employment arrangements (e.g. part-time work models, sabbatical arrangements, etc.) and the significance and meaning of the work carried out become more relevant.

The reformers of the old-age security systems will have to start thinking about how to address these issues. "More of the same" will work ever less as retirement ages go up, especially at a time when the most productive workers, i.e. those that usually build the backbone of an economy, are fairly affluent and have the financial means to retire earlier than foreseen. Not finding a framework for labour that would enable them to contribute in a way that they find motivating, they will be enticed to leave the labour markets and thus not help keeping the pension systems in balance.

Reforming the existing pension systems and securing their long-term viability is a necessity. At the same time it is also a very demanding undertaking, not only because of its complexity but also because a strategy of timid steps for gradual adaptation will work ever less. The Geneva Association—mainly through the Four Pillars research programme started already in the 1980s—has been and remains active in this area, hoping to continue stimulating discussions as to how we can meet the old-age security challenges of the future and what role insurers can play.

- Liaison Officers/Affiliated Organisations
- Other Events
- Publications
- Website

Liaison Officers/Affiliated Organisations

The Geneva Association Representation in Japan and East Asia

Katsuo Matsushita, Liaison Officer for Japan and East Asia

Katsuo Matsushita was appointed as the first Liaison Officer for Japan and East Asia in October 2009. His role is to promote and increase the profile of The Geneva Association in the region, to develop new relationships with insurance companies and other industry stakeholders in the region and to foster stronger links with existing members to help The Geneva Association increase its regional focus.

This appointment in Asia reflects the strong and ongoing economic growth and significance of the region on the world stage and particularly in the insurance sector. At the same time, countries within the region do not share the same or even similar cultural identities and levels of development in terms of growth rates, size of economy, per capita GDP, etc. This is also the case in the insurance market of each nation, with differing levels of market penetration and premiums. Therefore, The Geneva Association has appointed a senior and highly respected industry figure in the region in order to better understand and work more closely with the region.

Asia is a region of diversity and dynamic economic growth propelled by foreign direct investment and robust intra-region trade and investment. In order to have a clearer image of the general economy and financial/insurance markets, we tend to apply a grouping of four categories to Asia: (1) large emerging economies such as China, India and Indonesia , (2) developed and fully industrialised economies such as Japan, South Korea, Hong Kong, Taiwan and Singapore, (3) relatively developed economies in South East Asia such as Malaysia and Thailand, and (4) other developing economies.

At an early stage, foreign direct investment (FDI) worked as an ignition or trigger of economic development. It is still an important part of the contributing factors for the Asian economy to achieve enhanced technological progress, but we should not forget that robust growth of intra-region trade and investment are sustaining Asian development as well. Also, Asian companies, especially those of emerging countries, are investing abroad in natural resources, obtaining marketing opportunities and access to technologies. Now Asia is not only hosting FDI but also investing beyond the region.

The insurance market in Asia

It is well acknowledged that the Asian insurance market is diversified, reflecting its underling society and economy. Given the relatively higher pace of economic growth, Asia is attracting investment by foreign insurers, reinsurers, brokers and various types of professional service vendors. Despite a benign economic environment and higher growth rate of its insurance market, local insurers and foreign players face challenges.

In order to identify challenges and opportunities for market participants, investors and regulators in Asia, the process implemented here is a periodic stocktaking of "gap" or "contrast" in the market and society. This will work as a kind of guide to further research and analysis, such as in the following issues:

- The gap between the development of the manufacturing sector and insurance.
- The gap between catastrophic events caused by climate risk/extreme weather, earthquake, other type of large scale risk and inadequate adaptation/mitigation and lower insurance penetration.
- The gap between strong growth of top line and sluggish growth of bottom line in some

lines of non-life insurance.

- The gap between growing exposures in large urban areas and capital position of local insurance markets; by filling this gap, an international reinsurance capacity is contributing to the sustainability of Asian insurance markets. However, one should remember that there often is another gap between international reinsurers and Asian ceding companies over an evaluation of risk and pricing.
- The gap between demographic shift and inadequate or lower progress in building pension system and sustainable long-term care insurance/services.
- The gap between continuing growth of life-insurance liability and limited availability of long-term bonds in local capital market.
- The gap between the important role achieved by the insurance sector in society and the economy and its recognition and perception among the public.

On top of these, Asian insurers may face a new problem, an inflated claims cost caused by a rapid increase of commodity prices and labour costs.

In Asia, regulatory changes still are the main driver of market changes. Conversely, static law or regulation remains a main obstacle to market access which will deter the development of market and diversified products and services being offered to policy-holders.

Other strategic challenges, especially for multinational insurance companies (MNCs), are as follows:

- With the concept of risk-based underwriting and pricing being shared widely in many countries, the importance of risk databases, both company-wide and industry-wide, is increasing as well. However, in some jurisdictions in Asia, the current information available on risk is not sufficient, especially in terms of historical data of natural catastrophe risks. This situation has to be rectified in order to support truly risk-based underwriting procedure of insurance companies.
- "One size does not fit all" is common sense among insurance players in Asia. This mantra applies within jurisdictions because of the social/cultural divide between rich and poor, urban and rural area, the young and old generations. Against this backdrop, for example, channel strategies may be refined with internet channels intended for the younger generations and agency channels for the older generation of customers.
- To leverage the competitive advantage, international reinsurers and ceding companies are starting to develop closer cooperation initiatives to offer innovative products and services to their local markets. This may be the sign of development of the new role of international reinsurer in the region.
- Regulators and CEOs in the region always discuss the importance of ERM, appropriate underwriting, sound investment and capital management. But, above all, quality of human resource matters for every agenda is discussed. All the strategic goals will not be achieved without a successful HR strategy.

Impact of devastation quake and tsunami occurred in Japan, 11 March 2011

While it is too early to talk about an exact implication of huge damage caused to Japan as of this writing, it will bring a change of risk scenario and risk management in both concept and practice in Asia. For example, governments and the private sector will tend to think beyond the thinkable and more catastrophe cover needs may emerge among the public. This may be good for penetration of insurance, but the insurance sector will have to try to organise public and private partnership schemes to cope with increased demand of catastrophe cover as one of the alternatives.

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The Geneva Association Representation in North America

Gordon Stuart, Liaison Officer for North America

The main objective of the North American Liaison Office is to develop a general strategy for increasing and improving awareness of The Geneva Association in a huge and highly complex ”marketplace” of ideas, political alignments, economic interests, and of course, insurance. Gordon Stewart, the Liaison Officer, continues to introduce major U.S. research organisations, think tanks, etc. to The Geneva Association's extensive amount of valuable research over many years. Possibilities for collaboration, which has always been one of The Geneva Association's strengths, are being explored.

A joint project with the Peterson Institute for International Economics (PIIE) on how mature economies can develop public/private sector approaches to providing for their populations as the social contracts of these countries come under increasing stress has been initiated.

Much of PIIE's work concentrates on the make-up and affordability of policies that allow mature economies to provide economic security for their citizens. In this, its work more closely parallels that of The Geneva Association than any other U.S think tank. This area of research has other compelling reasons for engaging the collaborative capabilities of the two institutions: it is vital to the future quality of mature economies, and it is an area where cooperation between the insurance industry and governments has great potential for both.

The GA/PIIE project could culminate in a conference/symposium timed with the 2012 General Assembly meeting in Washington. Since this will also be the peak of the next U.S. Presidential election, it is not unrealistic to envision the project being part of the American national discussion on what will be a central issue in America as it is around the world. There is a unique opportunity to mutually reinforce the search for approaches to this cornerstone economic, political, and social concern in Europe, Asia, and America, while at the same time building a strong foundation for The Geneva Association in important government, business, and academic circles.

The Liaison Office is working to secure a favourable reception for The Geneva Association's views on systemic risk and insurance in the U.S. The foundation for its contribution to the U.S. is based on the value of its research and thinking, which emphasises what the Association can bring to some of the most difficult problems America faces.

From an insurance perspective, The Geneva Association's initiatives in the U.S. come at a time that is both promising and problematic. Insurance in the U.S. today is a tale of many cities. Fortunately, the one with which most Americans are most directly familiar, personal non-life insurance for homes and automobiles, is in its most stable condition in many years.

This has important implications for all lines of insurance. America is a land of home owners and auto drivers. Insurance for these is regulated at the State level. When public dissatisfaction with auto and home insurance runs high, so does political animosity towards all aspects of insurance. Elections for governor can turn on insurance issues. In 2010, none did. This means that more obscure issues like systemic risk classification need not be pursued against angry political headwinds.

Not that advancing industry views in all areas will be easy. Landmark legislation such as the Dodd-Frank Act, while more focused on other financial areas such as banking and securities,

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created the Federal Insurance Office, the Financial Stability Oversight Council, the Office of Financial Research, and the Consumer Financial Protection Bureau. The direction of each of these is unknowable, but the fact that they will impact insurance is undeniable. In addition to the offices named above, there are potentially over 500 new rules, 60 new studies, and 93 new Congressional reports.

All this will unfold in a national context of vast uncertainty—about standards of living, social views, demographics, political alignments, international interests and responsibilities. The era that began with the U.S.-led creation of a post-WWII international economic and security order is over. No new framework is ready.

The U.S. itself may face its most divided and contentious period since its Civil War. For example, U.S. Representatives have always faced tension between their national and local roles. Now a growing number are elected whose primary accountability is to a faction or a cause. Many have held no prior office. At least a dozen candidates are seeking the Republican nomination.

Perhaps most important, economic phenomena perceived as statistics mask their true material and emotional impact on populations. It is easy to understate the effects of a declining living standard viewed in the context of China and India, of joblessness in the context of immigration, of diminished personal prospects in the wake of a U.S.-led financial collapse, of energy fears buffeted by Japan, Deepwater Horizon, and the Middle East, the debt burdens of higher education, and the frustration of so much military power seeming to count for so little in terms of any of the above.

Taking all this into consideration, it is not surprising how many think tank reports have been taking their titles and subtitles from Y.B. Yeats' Poem The Second Coming, such as "Things Fall Apart"…,"The Centre Cannot Hold"…,"The Widening Gyre", etc. How can the still-palpable after-shocks of 2008 do anything but intensify the resonance of other anxieties and instabilities? Yet should this not also intensify interest in the necessity of insurance? Is this not also a powerful argument for the necessity of a sound insurance industry? The Geneva Association's current activities in the U.S. are designed to strengthen the industry's ability to contribute to a more secure and stable world. At the same time, they will explore ways in which insurance can effectively assist the leadership and people of the US. in meeting the serious uncertainties it and the world's other mature economies face today and tomorrow.

The Geneva Association Liaison Office in Eastern Europe

Jan Monkiewicz, Liaison Officer for Eastern Europe and Vice President General of The Geneva Association

The Liaison Office in Warsaw came into existence under the 2008 PZU-The Geneva Association agreement. Costs of its operations are sponsored by PZU.

The mission of the Liaison Office in Warsaw is to administer the PROGRES Research Programme and also to coordinate East European exposure of The Geneva Association. It coincides with the PZU drive for the modernisation and internationalisation of its activities.

The Warsaw Liaison Office focuses on the implementation of the PROGRES research Programme, organisation of the Annual International Regulatory Seminar/AIRS PROGRES Seminar and facilitating a dedicated dialogue network on regulatory and supervisory affairs. It also assists PZU, a relatively new and internationally inexperienced member from Eastern Europe, to engage actively into the activities of The Geneva Association. Thus PZU Officers became, so far, members of three working groups: The Chief Risk Officers-, The Chief Investment Officers- and The Chief Communication Officers Fora.

In 2010, the Warsaw Liaison Office focused on three basic issues:

- Assistance in the organisation of the AIRS 2010, PROGRES high-level 26th Annual Seminar dedicated to the debate on "Global regulatory and supervisory repair: aligning national interests and international necessities".
- Preparation of the concept, draft programme and selection of the most competent speakers for the AIRS 2011, PROGRES high-level 27th Annual Seminar focused on "Balancing regulation and supervision: In search for optimal global solutions".
- Coordination of the work of a team of 33 top-level experts representing practitioners, supervisors, regulators, academics and international insurance organisations writing the book *The Future of Insurance Regulation and Supervision—A Global perspective*. The aim of the book is to offer an analysis of factors and forces impacting insurance regulations in the coming decade. It is expected to attract the interest of regulators and supervisors affected by new developments on the global insurance market. The book is addressed to a wide audience spanning from students to professionals in the insurance industry, as well as journalists and researchers. It is divided in seven parts dedicated to: global framework, supervisory and market dimensions, stakeholder protection and emergence, developed and international markets. Development and distribution of the book has been supported by The Geneva Association which intends to include this initiative as an important part of its regulatory programme. The book will appear on the market in May 2011.

In view of The Geneva Association's development policy towards Central and Eastern Europe and expected implementation of The Geneva Association outreach function, cultivating good relations with two most significant players in the region—Russia and Ukraine—has been continued. In November 2010 Jan Monkiewicz during an international conference in Moscow spoke to a number of Eastern European insurance experts who were aware of important changes in the regulation and supervisory systems of the insurance industry and were deeply concerned about their consequences. They expressed their interest in broader involvement in the global debate and eagerness for further integration into the global insurance market.

The Geneva Association was perceived as a potential major, well-positioned group player in the world arena that might be helpful in voicing their needs and catching up with rapid global changes. On the other hand, companies and institutions in the region have local knowledge and contacts to decision- and law-makers, and closer relations with them may be of real value in our outreach programme. Consequently, it is the Warsaw Liaison Office's intention to convene, upon the PZU initiative, in Kiev or Warsaw, in winter 2011/2012 a meeting of CEE insurance industry players to discuss these needs further and investigate a potential role of The Geneva Association in the process.

The share of the CEE countries in the world insurance market is still insignificant and insurance penetration very low. Such a mix, however, raises optimism about the prospects for the insurance market development in the region.

The Polish insurance market is by far the largest in the CEE region. In the group of the five largest countries of the region—Poland, Czech Republic, Hungary, Ukraine and Romania—Poland in 2010 represented nearly half of the circa US$ 50 billion of the region's gross written premium. The second largest market—the Czech Republic—was more than two times smaller. In the last decade the Polish insurance market has developed vigorously. In 2000-2009 premiums increased 250 per cent. The driving force was life insurance, with nearly a five-fold increase, while property insurance grew by 75 per cent. In the last two years, 2009-2010, annual premium growth stayed within the 5-6 per cent range.

2010 witnessed an important step in the privatisation of the Polish insurance market. After an amicable conclusion of the seven year long conflict between its two main shareholders, the largest Polish state-owned company, PZU SA, listed on the Warsaw Stock Exchange. The IPO provided private investors with an opportunity to invest in the Polish insurance market and created a new CEE capital insurance leader replacing Vienna Insurance Group.

The Associates Group

The Associates Group was established after the 2009 General Assembly in Kyoto. The Group comprises a senior company figure for each of The Geneva Association's Board Members who acts as a liaison for his or her company and supports the preparation of the Board meetings. Associates also act as representatives of their companies on specific research issues and help harness company resources to support Geneva Association work streams (such as in the case of the Financial Stability in Insurance Working Group).

The creation of the group increased the degree of interaction between the Association and its Board's companies and has created a mechanism for the analysis and discussion of international insurance issues. The group is coordinated through conference calls and direct meetings, with the meetings hosted by each member's company in turn.

The first Associates meeting covered by this report took part in April 2010 as a preparatory meeting for the IAIS High-Level Meeting, the Board Meeting and General Assembly in Zurich. It took place shortly after the initial publication of the Association's work on systemic risk in March 2010 and discussed the ongoing strategy for communications on the issue, not least the IAIS Financial Stability Committee Meeting that was about to take place. Naturally, with the discussions on systemic risk being held at the G-20 level, a careful focus was kept on the activities of the G-20 and of its take on systemic risk. Later in the year, the Associates were to assist the SRI Working Group in the production of a series of letters to the G-20, the IMF and the IAIS on the subject of systemic risk regulation.

Over the last year, whilst the subject has been under significant discussion, the work of the Associates on systemic risk has been passed on to the Financial Stability in Insurance Steering Committee and Working Group (although in some companies these are represented by one and the same person). This has freed Associates to focus more on the Board-related issues of the Association in preparation for the February 2011 Board Meeting in Beijing and the May 2011 General Assembly in Rio de Janeiro. Whilst twice-yearly meetings had been the agreed schedule for the Associates Group at its inception, it became clear by the end of 2010 that more meetings would be needed if the group were to keep pace with the current tempo of Geneva Association activities. Meetings and conference calls were held in November and December 2010, as well as February and March 2011. To date, the work of the Associates has been to keep Board Members more closely informed and up to date with the Association's activities, leaving the Board Meetings a more focused platform for the discussion of the most important issues at hand.

World Fire Statistics Centre (WFSC) (*www.wfsc.info*)

The World Fire Statistics Centre (WFSC) has operated since the late 1970s as an important locus for data collection and dissemination

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of national statistics on the incidence and cost of fires worldwide. Surprisingly and despite its clear importance, comprehensive work on fire statistics has generally not been undertaken by national governments themselves, nor by any of the possible international organisations which might have taken on the task. Grounded upon the shared interest of the insurance industry in learning more about the risks posed by fire and driven by the talents and energy of its founding Director Tom Wilmot, then later his successor Tony Paish, and now Brian Woodrow, The Geneva Association has provided the platform within which the WFSC could operate and develop over the past thirty years. Over those years the WFSC revised and applied the basic methodology for assessing fire costs in the European context, specifically with regard to structure and property fires, and then extended coverage to North American and selected Asia-Pacific countries.

The Centre is concerned with the practical problem of reducing economic and material waste from fire. The main focus of its work, the collection, analysis and dissemination of internationally comparable fire cost statistics, is thus seen very much as a means to an end: providing reliable national data on fire costs, their incidence and estimated costs and national efforts at fire protection, prevention and research, but also persuading governments to adopt coherent fire strategies aimed at reducing national fire costs.

Each year the WFSC collects and collates fire cost statistics, under seven main headings, from a number of leading countries worldwide, mainly within Europe but also including, for example, the U.S., Japan and Canada. Currently, the seven data fields queried include: Direct Fire Losses; Indirect Fire Losses; Human Losses—Fire Deaths and Injuries; Fire Brigades; Fire Insurance; Building Protection; Fire Research, Training and Publicity.

Each Annual Report from the Centre to the United Nations, through its United Nations Economic Commission for Europe (UNECE) Committee on Housing and Land Management, forms the basis for an Information Bulletin with a worldwide direct circulation of over 300 copies to relevant government departments, fire protection associations, fire brigades, insurance companies, fire engineers, the trade press and academic fire experts. This Information Bulletin also provides an opportunity to showcase examples of how WFSC statistics can be utilised effectively to deal with current fire problems and issues.

The Geneva Association has organised or supported international meetings and seminars every three to four years, generally in Geneva, in order to enable the Centre's latest work to be presented and discussed and to provide a forum for other fire experts working in related fields. Planning is underway for a Geneva Association sponsored conference/seminar on world fire statistics in 2012.

The WFSC publishes a newsletter, *World Fire Statistics—Information Bulletin of the World Fire Statistics Centre,* which appears annually. It presents statistics on national fire costs from over 20 leading countries in an effort to persuade governments to adopt strategies aimed at reducing the cost of fire. The WFSC newsletter has been published since March 1984 and is now consulted frequently and widely on the WFSC and The Geneva Association websites.

Efforts are underway to extend and enhance the work of the WFSC. In September 2010, the WFSC presented its Annual Report to the UNECE Committee on Housing and Land Management which was, as usual, warmly received. As well, the annual WFSC Information Bulletin which reports current fire loss data was published and, so as to showcase WFSC work more effectively, will in future be supplemented with topical articles on the fire situation in specific countries or regions as well as analyses of important comparative trends. A complete dataset of all WFSC statistics collected from 1979 to 2007 has now been prepared and work

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Fire as Vulnerability: New Challenges for the WFSC

The Future of the WFSC

Not only will it be important in the coming years to increase the number of countries reporting in the WFSC statistics and especially to extend their global reach and representativeness, it will also be important for the WFSC to take account of the changing contexts and conditions within which fires arise and cause death and destruction. In particular, it will need to go beyond the structures and property damage data currently collected to pay more attention to wildfires and fires associated with other natural disasters.

Greater attention needs also to be directed towards viewing fire in a broader risk management and disaster mitigation perspective. In articles and interventions at numerous conferences over the past two decades, the WFSC has called repeatedly for governments to develop "national risk management strategies" within which "a national fire strategy" would be one important component. In addition, it is also important to situate fire among the wide range of natural disasters occurring worldwide each year—from volcanoes and earthquakes to windstorms and heat waves—and to understand the possible linkages and comparabilities among them. Only then can we see where fire fits in the broader picture and how governments, practitioners and informed citizens can make proper decisions about and take cost-effective actions in adopting risk management and disaster mitigation strategies in the years to come.

Thirdly, one common theme underlying these new understandings of fire is the notion of fire as vulnerability. The concept of vulnerability is drawing increasing attention within the natural, physical and social sciences over the past decade or so and provides an interesting way of understanding the future role and importance of fire. The Applied Services Economic Centre's (ASEC) Services and Vulnerability project is just one example of such a focus on the concept of vulnerability. In essence, vulnerabilities are those contexts and conditions, inherent or circumstantial, which precede the occurrence of extreme events whose specific causes and consequences may be largely unpredictable. Uncontrolled fire, as is evident in the increasing incidence of wildfires worldwide or the continued burning of fossil fuels which release CO^2 into the atmosphere, may act as one vector of vulnerability which leads to or presents itself in extreme events or, through rising global temperatures, contributes to global climate change of significant size and scope. Indeed, the Intergovernmental Panel on Climate Change (IPCC) has only recently identified fire as just such a vector of vulnerability and significant contributor to global climate change in its most recent climate models. Just as our understandings of fire itself and its causes and consequences are changing, so too are our requirements for comprehensive and relevant world statistics on fire.

is being done to make the data more accessible. Attempts are also ongoing to fill in country gaps in the existing fire losses dataset and to recruit national correspondents in countries beyond the current 20 or so countries.

Applied Services Economic Centre (ASEC) *(http://asecinfo.org/)*

The Applied Services Economic Centre (ASEC) was initiated in 1985 by The Geneva Association's Founding Secretary General, Orio Giarini. Mr Giarini was concerned at the time that not enough thought and attention was being directed to the steady evolution of modern economies and societies from agriculture and manufacturing towards a "services economy" with all of the multiple and varied implications which that development might imply. ASEC was thus conceived essentially as a lookout institution—an "observatoire"—which would identify, focus and report on emerging services trends and issues and serve to stimulate interest and wide-ranging efforts by other affected parties.

ASEC studies and researches important cross-cutting themes and issues related to the development of the modern global

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service economy. Our 21st century reality of predominantly services-based economies and societies in all countries, advanced as well as developed, and of an ever-globalising "service economy" are still not always properly understood. ASEC's continuing purpose is to investigate those developments and trends within the evolving global service economy which deserve greater attention in their own right and will be of broad interest to the insurance industry worldwide.

ASEC operates as a loose consortium of researchers and practitioners in the field of services and insurance. It offers a forum for open discussion and exchange of views on key topics, conducts studies and advises on services issues, and seeks to stimulate interaction among business, government and officials of international organisations through seminars, conferences and other activities. ASEC is not committed to any particular point of view or commercial interest; rather, those associated with ASEC are brought together by the shared perspective that services currently underlie and drive national economies as well as the contemporary global economy. To this end, ASEC conducts enquiries and studies on services-related themes, participates in and sometimes sponsors seminars and conferences, and attempts to contribute to a better understanding of the role and function of services in modern global services economies.

For more than 25 years now, ASEC has drawn attention and contributed to the evolution of a continuing series of emerging services-related trends and issues:

- Economies and societies worldwide were evolving increasingly into "service economies". Services are not simple units of production or goods in trade; rather, they are closely tied up with our concepts of uncertainty/certainty, risk and value and pose a fundamental intellectual challenge both to neoclassical economics and to conventional thinking about the operation of modern economies and societies. Through a continuing association with the Club of Rome, these ideas about services and the "service economy" have come progressively to be developed and disseminated widely.
- The 1980s and 1990s witnessed the first real efforts to bring services within the realm of international trade law and regulation, and to liberalise trade and investment in services markets worldwide. Since 2000, The Geneva Association has continued to follow and report on trade in services issues, and specifically those relating to financial services, as these have proceeded within the current World Trade Organization Doha

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The ASEC Services and Vulnerability Project

The ASEC Services and Vulnerability Project focuses on the concept of vulnerability, as distinct from related notions of risk, hazard and uncertainty, as a controlling concept for understanding our 21st century world. At the core of ASEC lies recognition of the need for fundamental rethinking of the role and function of services within modern economies and societies. We understand vulnerability to refer to inherent or circumstantial conditions which may result in an event/outcome occurring with causes or consequences unknown. In terms of Donald Rumsfeld's now infamous formulation, vulnerabilities are the missing category—the "unknown knowns"—where we know more or less what the problems and issues are but often lack the requisite knowledge about their specific incidence and consequences to take appropriate and effective actions.

Vulnerability is a most difficult concept to nail down. It is a term commonly used in popular parlance and increasingly in more specialised discourses, but without any common and agreed meaning. In popular parlance, vulnerability is often presented in terms of threat, peril or weakness—the threat of a bird flu pandemic, the peril of nuclear disaster, the weaknesses of the internet or of other critical infrastructures—but the essential character of the vulnerability is usually left unexplored. In the more specialised lexicon such as insurance, as well, vulnerability equates to the notion of "collective perils" or "emerging risks" but, we will argue, needs to be given more embedded meaning than simply a composite or open-ended list of subjects and issues which might pose liability problems. Our early 21st century world is very much a world sensitive to vulnerability even though we have failed until now to pay much attention to the essential concept.

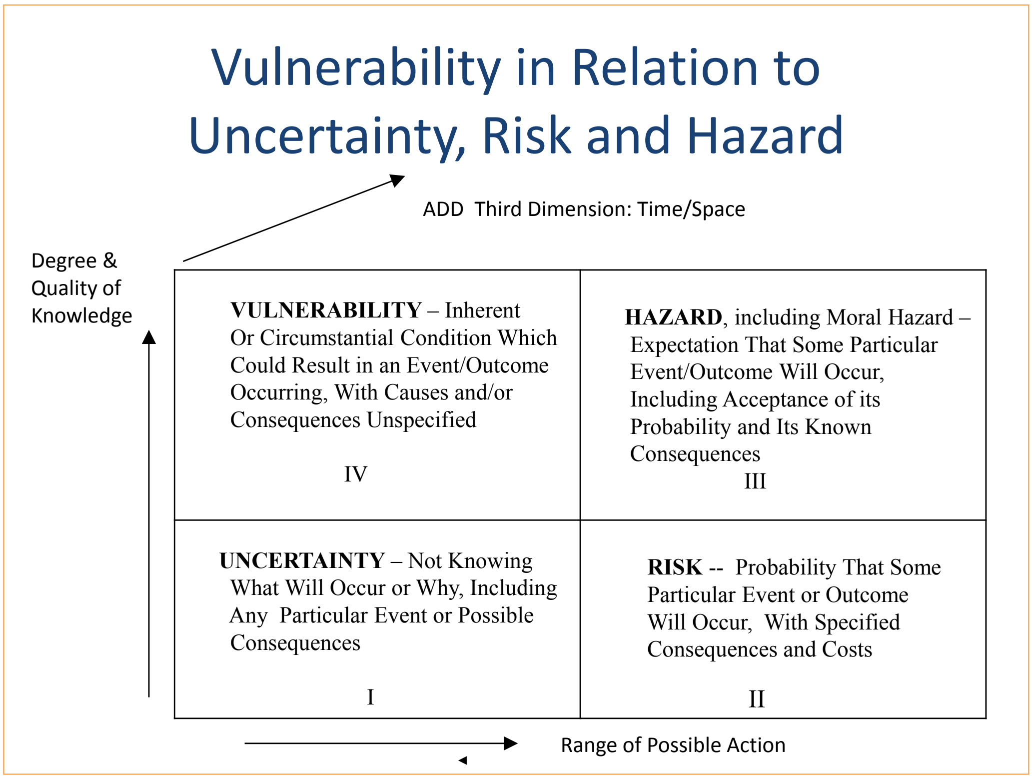
We conceptualise specific instances of vulnerability as arising within any number of different contexts—technological, environmental, economic/financial, and institutional/organisational—where individual case studies can be investigated and cross-cutting issues can be examined. Vulnerabilities of various and different sorts can then be understood in terms of the inherent or circumstantial conditions which allow any of a number of other possible vulnerability event/outcomes to actually occur and to have the causes/consequences that they have. These vulnerabilities can be inherent or circumstantial in that they are grounded in, or contingent on, both the common regularities and sometimes in the extreme events which are part of modern global economies and societies. *Ex post facto*, the event/outcome itself and its causes/consequences can be made subject to analysis in terms of a set of criteria— source and agency; scale, scope and intensity; mode of explanation; degree of interrelatedness; criticality; among other characteristics. On this basis, it is possible to develop a comparative "metrics of vulnerability' which can then be utilised to generate the "lessons learned" from any particular vulnerability incident and can also provide the underlying methodology by which we can compare among different vulnerability cases. In the future as well, it may be possible to move towards an *ex ante* "diagnostics of vulnerability" for assessing potential vulnerability incidents which may (or not) occur and critically evaluating possible "coping strategies" for dealing with identified vulnerabilities The aim of the ASEC Services and Vulnerability Project, then, is to explore the concept of vulnerability in both its specific and general contexts and to evolve a methodology for analysing and assessing vulnerability.

ASEC continues to monitor various issues related to services and the service economy but, since 2003, it has focused primarily on its Services and Vulnerability Project. A core conceptual framework and basic methodology and metrics for understanding the concept of vulnerability has been established and contextual background studies are available on technological vulnerabilities and on environmental vulnerabilities. Work is also proceeding on various aspects of financial vulnerability, including a concise paper on the generic concept of systemic risk, incorporating both financial and non-financial aspects of that notion. As well, a vulnerability research database which identifies ongoing work being done by groups and organisations around the world who are utilising specific conceptions and applications of the concept of vulnerability in their work is being undertaken. Approximately 20 such groups and organisations have already been profiled and a searchable database is being prepared for installation on the ASEC website. The ASEC website was entirely redesigned and reworked end of March 2011.

Round of trade negotiations. ASEC remains firmly committed to the view that continuing liberalisation of trade in services establishes an essential foundation for further evolution towards a modern global services economy.

- By the year 2000, conventional notions of services were changing and the notion of services required rethinking in light of ongoing developments across services sectors and the emergence of a so-called "new economy". ASEC then initiated a sequence of invited seminars which sought to explore the changing role and functions of services. ASEC continues to champion the need for a thorough rethinking of prevailing understandings of services, how these continue to evolve in a changing world, and the implications of how our globalising world economy has become increasingly a "globalised service economy".

Since 2003, ASEC has been involved primarily in efforts to explore and understand this underlying concept of vulnerability as an essential feature of modern, global, services-based economies/societies and to proceed towards the development of metrics, diagnostics and coping strategies for dealing with multiple and different types of vulnerabilities affecting the "global service economy". Along with a number of other individuals and organisations, ASEC is making determined efforts to develop and promote the concept of vulnerability and to situate it in relation to often overlapping notions of uncertainty, risk and hazard, as well as to undertake related studies on specific vulnerabilities affecting our 21st century world. ASEC is co-directed by Brian Woodrow of the University of Guelph and Patrick M. Liedtke of The Geneva Association and therefore operates both out of Guelph in Canada and Geneva.



Other Events

Overview of Events 2010/2011

2010

April

- 7 April, Paris, 3rd Geneva Association Associates Meeting, hosted by SCOR (Associates only)
- 14-15 April, Montreux, The Geneva Association/IAIS Executive Committee High-Level Meeting (Board Members only), hosted by The Geneva Association
- 15-16 April, Montreux, 26th PROGRES Seminar on Insurance Regulation and Supervision
- 19 April, Geneva, 4th Meeting of the Climate Change and Insurance Project of The Geneva Association (CC+I Working Group members only), hosted by The Geneva Association
- 29-30 April, Lisbon, 8th ART of CROs, hosted by Companhia de Seguros Tranquilidade (CROs of member companies only)

June

- 2 June, Zurich, 37th General Assembly of The Geneva Association (members only)
- 6 June, Madrid, The Geneva Association/IIS Research Award Partnership
- 24-25 April, Bermuda, M.O.R.E. 24 on Mapping and Modelling Risks, hosted by Axis Re

July

- 25-29 July, Singapore, 2nd World Risk and Insurance Economics Congress (WRIEC), jointly organised by the Asia Pacific Risk and Insurance Association (APRIA), the American Risk and Insurance Association (ARIA), the European Group of Risk and Insurance Economists (EGRIE) and The Geneva Association

September

- 27-28 September, São Paulo, 2nd CC+I Seminar on "Climate Change: Opportunities for Latin American Insurers", hosted by Allianz Brazil

October

- 4-5 October, Madrid, 8th Meeting of The Geneva Association's Chief Communications Officers, (Chief Communication Officers only) hosted by Caser Group and MAPFRE
- 12 October, Rome, Italian AXA Forum on "Future, Finance, Trust, Facts. Challenges for Financial and Insurance Industry Between Reality and Perception", organised by AXA Italy, ANIA and The Geneva Association
- 19-20 October, London, 7th Liability Regimes Conference on "Exploring Environmental Liability: An Open Flank for Insurers and their Clients", hosted by RSA Insurance

November

- 8 November, London, 1st MENA Insurance CEO Club on "How to set visions for the Middle Eastern and North African countries", co-organised by the *Asia Insurance Review* and The Geneva Association
- 17 November, London, 5th Meeting of the Climate Change and Insurance Project of The Geneva Association (CC+I Working Group members only), hosted by Axis Re
- 18-19 November, Paris, 7th Health & Ageing Conference of The Geneva Association on "U.S. and French Long-term Care Insurance Markets Development", co-organised with Willis Re
- 24-25 November, Munich, 6th CRO Assembly on "A vision for risk management in the 'new normal'", jointly organised by The Geneva Association, Munich Re and CRO Forum

December

- 6 December, London, 7th International Insurance and Finance Seminar of The Geneva Association, hosted by Prudential plc

2011

January

- 11 January, New York, Joint Industry Forum for P&C Insurance Industry, co-sponsored by The Geneva Association

Other Events

- 16-18 January, Singapore, 1st Asian Climate Change Summit on "Tackling Climate Change —Being ready to face threats and opportunities", co-hosted by the *Asia Insurance Review* and The Geneva Association

February

- 17-18 February, Amsterdam, 13th Meeting of the Amsterdam Circle of Chief Economists, hosted by ING (ACCE members only)
- 24-25 February, Innsbruck, 14th Joint Seminar of the European Association of Law (EALE) and Economics and The Geneva Association on "Law and Economics of Natural Hazard Management in a Changing Climate", jointly organised by the University of Innsbruck/ Climate Services Center, Hamburg

March

- 11 March, Geneva, 1st International Trade and Insurance Group Meeting, hosted by The Geneva Association
- 20-22 March, Singapore, 11th Asia CEO Insurance Summit, co-organised by Asia Insurance Review and The Geneva Association
- 31 March, London, 5th Meeting of Chief Investment Officers in Insurance, hosted by Aviva (CIO members only)

The 37th General Assembly of The Geneva Association

3-4 June 2010, Rüschlikon (Zurich), Switzerland

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 inception by Fabio Padoa, Orio Giarini and former French Prime Minister Raymond Barre in 1973. It provides an opportunity for the members to exchange their ideas and discuss key strategic issues that are major opportunities or challenges for the development of the sector and to prioritise long-term strategic issues.

The Geneva Association held its 37th General Assembly in June 2010 in Rüschlikon, Switzerland hosted by local insurers and reinsurers, Swiss Reinsurance Company Ltd, Swiss Life SA, Zurich Financial Services and Bâloise-Holdings.

During their meetings, the CEOs discussed a series of current insurance issues which were of concern to them, including:

- getting the macro dimensions right in the light of systemic risk, global regulation initiatives and insurance in the international institutional landscape, taking into account Solvency II, including discussion on a common framework for the supervision of internationally active insurance groups (ComFrame) and the IAIS's view of systemic risk and the insurance sector;
- discussions on seizing opportunities and the competitive landscape for insurance vis-à-vis other financial service providers, with particular attention paid to the market's view and the position of the insurance industry in the pension business after the crisis;
- discussions on creating value, the insurance value proposition and business operations, highlighting the future role of insurance in the global economy;
- the impact of longevity on insurance risks in the field of life insurance and annuities, also covering changing life cycles and the consequences on the demand for insurance cover;
- the dynamics of liability regimes and the legal, political and social challenges that they pose, including a presentation on a liability insurance market practitioner's view and if the future of the liability marketplace presents "a darkening cloud of opportunity"; and,
- insurance and climate change, caught between business development, financial markets and social expectations, including

Other Events

Nikolaus von Bomhard, Chairman of The Geneva Association, at the 2010 General Assembly press meeting.

a debate on climate change globally in the light of The Geneva Association's Kyoto Statement.

For the first time, The Geneva Association organised a press meeting, where a small group of senior journalists were updated on two key topics covered by the Association this year, namely systemic risk and climate change, and presented with the results of a survey of its membership on current issues in the insurance industry. On systemic risk, journalists were updated on progress of The Geneva Association's discussions with international regulators and policy-makers prior to the G-20 meetings that were to take place later, on 26 and 27 June 2010. The current extended work on systemic risk issues, which was being prepared for engagement with the IAIS, was used to further substantiate the discussions. Kunio Ishihara, Joint Chairman of The Geneva Association's Climate Change and Insurance Project and Chairman of the Board of Tokio Marine & Nichido Fire Insurance Company, delivered a synopsis of the project's work over the last year.

Honorary and Expert Guest Speakers at the Assembly included: Tony Blair, Former Prime Minister of the U.K.; Gabriel Bernardino, Chairman, then CEIOPS; Joseph Deiss, Former Member of the Swiss Federal Council; Yoshihiro Kawai, Secretary General, IAIS; Raimond Maurer, Chair of Investment, Portfolio Management and Pension Finance, Goethe University Frankfurt; Kevin Mc Carty, NAIC Vice President and Commissioner, Florida Office of Insurance Regulation; Thorn Rosenthal, Partner, Cahill Gordon & Reindel LLP; Therese M. Vaughan, CEO, NAIC; and Peter Zweifel, Professor of Economics, Zurich University. There were also Special Guests, in the persons of Hiroshi Fukushima, Managing Director, The Toa Re Co. Ltd; Monica Mächler, Vice Chair, FINMA; Samuel Monteiro dos Santos Junior, Vice President, Bradesco Seguros S.A.; and Jiying Pang, Vice Chairman of the Board, China Reinsurance (Group) Company.

In 2011, The General Assembly will take place in May and will be hosted by Sul America Seguros, Bradesco Seguros, IRB-Brasil Re, and supported by CNSeg in Rio de Janeiro, Brazil.

CCO Conference

4-5 October 2010 , Madrid

The 8th Chief Communications Officers Meeting (CCOM) took place in Madrid in October 2010 and was hosted by MAPFRE and Caser Group. The programme focused on three core areas: insurance communications on the subject of climate change, best practice corporate and social responsibility reporting and international perspectives on perceptions of insurance and its communications.

For the first time, the Chief Communicators of national and regional trade associations were invited to the meeting and their inclusion provided additional perspectives on the issues under discussion. With their experience of aggregating opinion on challenging issues and the wide range of discussions they have in the definition of a consensus, their contributions to the discussions were hugely valuable and insightful.

The discussion on climate change was opened by Anthony Knap, Senior Scientist and Director of The Bermuda Institute of Ocean Sciences whose presentation articulated the implications of climate change for insurers. Anthony Knap highlighted areas where insurance communications have worked well and where challenges remain. Liz Forster of The Association of British Insurance's (ABI) provided details on the U.K. trade association's successes and challenges in dealing with U.K. consumers and government on flood management and the experiences the industry has gained in recent years in dealing with increasing flood damage and claims. Simone Lauper of Swiss Re provided insights on the experiences and activities of the world's largest reinsurer on climate change risk issue communications. Finally Celia Powell of Partner Re discussed the very different U.S. perspective of the importance of climate change and how legislation and social awareness might increase levels of concern.

The discussion on corporate and social responsibility (CSR) was led by Christian Lawrence of Munich Re and Emmanuel Touzeau of AXA. At the heart of the discussion was the need for transparency in CSR communications and the value both internally and externally of embedding CSR values in a company's culture by providing Board level sponsorship of the issue.

Ed Heffernan of XL Capital led the final discussion on perspectives of insurance communications with his insights into U.S. political perspectives. He was supported in the U.S. contributions by Jeanne Salvatore of the Insurance Information Institute (III) whose unrivalled experience of dealing with the U.S. public on insurance communications issues provided some important ideas and concepts in managing company and industry reputations. Wendy Hope of the Canadian Life and Health Insurance Association discussed the management of reputational risk issues and Janina Clark of the CEA provided an analysis of political and public perceptions of the insurance industry in Europe.

A multiplicity of resulting issues and comments were raised by the various discussions and it was clear with the diversity of communicators, both by area of expertise and geography that every participant saw new perspectives. The themes were selected, not only to dissect the issues at hand, but also to look at ways that industry communicators can collaborate and coordinate their efforts to serve the wider industry more effectively and subsequent discussions have proved this to have worked.

The meeting was addressed by a number of outside speakers including the President of the Spanish Communications Directors Association, José Manuel Velasco and Mannava Sivakumar, Director Climate Prediction and Adaptation Branch—World Meteorological Organization to whom we are very grateful for their participation. Special thanks go to MAPFRE and Caser Group for their considerable efforts and generosity in making the meeting a success.

11th CEO Insurance Summit in Asia

21-22 March 2011, Singapore

The theme of the 11th CEO Insurance Summit in Asia, which took place in March 2011 in

Other Events

Singapore was, “Repositioning for a New Competitive Era in Asia—How have the Rules of the Game Changed?—Zeroing in on Profitable Growth Nuggets in Asia for Sustainable Business”. It was co-organised by The Geneva Association and Asia Insurance Review. It focused on how CEOs can leverage on Asia’s potential, on specific opportunities and risks inherent to this market, on regional diversity and on how the insurance industry is changing worldwide and its influence on the Asian market.

It was well attended, with over 200 delegates and high-level speakers from companies such as Allianz Insurance (Hong Kong) Ltd., Citibank (Hong Kong) Ltd., Hannover Life Re, ING Asia-Pacific, Sun Life Financial Asia, Zurich Financial Services Ltd., Universal Sompo General Insurance Co. Ltd, ACE Insurance Ltd., First Capital Insurance Ltd, the General Insurance Association of Singapore Pte. Ltd., ING Bank N V, Lloyd’s of London (Asia) Pte. Ltd., Manulife Financial, the Monetary Authority of Singapore, Munich Re, SCOR Reinsurance Asia-Pacific Pte. Ltd., Swiss Reinsurance Company Ltd. (Singapore Branch), XL Insurance Company Ltd., Aviva NDB Insurance PLC and the Insurance Supervisory Department, Ministry of Finance, Vietnam.

On the first day, Patrick M. Liedtke specially addressed the attendance on “Changing Rules—Changing Game? Repositioning the Insurance Industry”. That first day also saw discussions on repositioning the insurance industry in Asia and how leaders can grow. “Repositioning for a New Competitive Era in Asia”, preceded an industry viewpoint, “Repositioning in the New Era—The AIA Story in Asia”; There was also a presentation specially tailored for CEOs on “From Good to Great: Growing Leaders”.

The afternoon session was broken into two parts; the first focusing on how the Asian insurance industry can develop exponentially, the second on a CEO panel showing the agendas and concerns of world insurance leaders. The first section saw a presentation on “Catapulting the Asian Industry and Breaking the Barriers of Growth”. The CEO Panel was an interactive discussion on what keeps CEOs awake at night and the new agenda for CEOs focusing on lessons learnt from the last decade whilst identifying niche areas of growth, and how CEOs can leverage on Asia’s potential.

The second day was split into three important and very different themes. The first focus was on “The New Rules of the Game”, with a keynote address on “Asia—Many Markets or One?” and a presentation on “Risks—The Thinkable and Unthinkable—Which are we managing?”. Then, the attendees got to think about, “Awakening the Giants of Asia”, with presentations on “Building CEO Legacies—Imperative Training and HR Skills for Successful Future CEOs” and on “Switching Gear: Profitable Growth—From Fantasy to Reality?”. The day and conference closed with a “Solutions Panel”, with first a panel focusing on leveraging technology to bring Asian companies to the next level of success, staying ahead in a highly competitive market; using technology to boost top line and bottom line, and responding to the needs of the industry. After this special panel, there was a presentation on “CEOs and Solvency II—Time to Prepare and be Ready”. The wrap-up presentation was on “Zoning in on the Next Generation—Key Qualities of the 21st Century CEO”, which really marked the step into the future of the insurance industry in Asia.

The conference was overshadowed by the recent Japanese earthquake, tsunami and subsequent nuclear issues but it was clear from conversations at the periphery of the conference that the insurance industry was standing up to play its part in Japanese consolidation and recovery.

Publications

The Geneva Association publications take six different forms in addressing its various audiences:

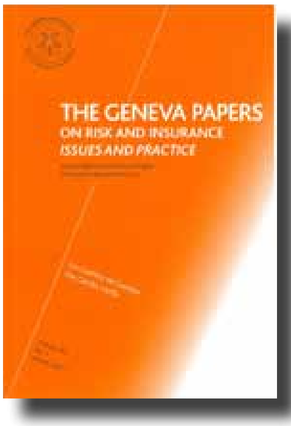
- two journals, *The Geneva Papers on Risk and Insurance—Issues and Practice* and *The Geneva Risk and Insurance Review* (formerly *The Geneva Papers on Risk and Insurance Theory*);
- reports on major themes discussed throughout the year, otherwise known as The Geneva Reports;
- eight different newsletters;
- *Etudes et Dossiers*, or working papers from conferences and meetings; and,
- books and monographs written by Geneva Association staff and/or external collaborators.

In 2010/2011 the profile-raising drive undertaken the year before to increase the profile of The Geneva Association, part of which has been an effort to make each publication more available and widely known to its target audiences, which include academia, the insurance industry, and the general public, has been reinforced. This has strengthened the position of The Geneva Association as a worldwide leader in insurance economics research and thinking.

Journals

The Geneva Association's main publication, *The Geneva Papers on Risk and Insurance*, was founded in January 1976, under the auspices of the first President of The Geneva Association and former Prime Minister of France, Raymond Barre. As stated by Mr Barre, the goals of *The Geneva Papers on Risk and Insurance* were first and foremost to become the voice of insurance at the highest world level to help elaborate and confront key strategic views of the sector; and second, to stimulate a constructive dialogue between insurance and its social and economic partners. In 1990, with the development of more theoretical studies on risk and insurance, *The Geneva Papers on Risk and Insurance* were separated into two series: *The Geneva Papers in Risk and Insurance—Issues and Practice* and *The Geneva Papers on Risk and Insurance Theory*; the latter became *The Geneva Risk and Insurance Review*. These two publications are examined in more detail below. Both journals publish peer-reviewed articles and are issued by Palgrave Macmillan. The archives less than three years old are available via the Palgrave Macmillan (Palgrave) website (*www.palgrave-journals.com*). Archives are also now fully digitised and online on The Geneva Association website and in the archives section of the Palgrave website.

The Geneva Papers on Risk and Insurance—Issues and Practice



Founded in 1976 and published quarterly by Palgrave Macmillan, *The Geneva Papers on Risk and Insurance—Issues and Practice* publish papers which both improve the scientific knowledge of the insurance industry and stimulate constructive dialogue between the industry and its economic and social partners. It is essential reading for academics and researchers in insurance, insurance industry executives and other professionals who are searching for a 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 journal now utilises Palgrave Macmillan's industry-leading Advance Online Publication (AOP) service. These AOP articles are fully citeable, as Palgrave publishes only the final versions of papers, and they can be referenced as soon as they appear on the AOP site, using the digital object identifier (DOI). This feature went live in October 2010.

Publications

The Geneva Papers on Risk and Insurance—Issues and Practice showed good growth in total from 2009. The journal benefited particularly from the revenue associated with the Insurance in Asia supplement, from member subscription revenue deferred from 2009 and from good returns from aggregators. It benefited from many analytical and informative articles in 2010 and early 2011, so much so that The Geneva Association decided to publish a special additional issue on insurance in Asia (GPP 35(SC1)), featuring high-level analysis on the state of insurance in the region, in different sectors of the field. The 2010/2011 published issues were:

- The April 2010 issue (GPP 35(2)) of the journal offered papers on a wide variety of issues, namely insurance, development and economic growth; reinsurance intermediaries, comparing EU and U.S. regulatory approaches; the measure of performance in the insurance industry, using frontier efficiency methodologies; an empirical analysis of non-life insurance consumption stationarity; modelling different types of bundles automobile insurance choice behaviour, using the example of Taiwan; and a Malmquist index for the Greek insurance industry. The issue also included two insurance company views on climate change and insurance.
- In July 2010 (GPP 35(3)), The Geneva Association published a tripartite Geneva Papers on Economic Issues in Law and Insurance, the Development of Insurance Markets and Regulation and a Special Contribution reviewing The Geneva Risk and Insurance Review in 2009. The first part looked at the history of corporate liability and its lessons for the future, the potential for governments to become reinsurers of catastrophe risks, the industry's responses and policy friction in the face of emerging catastrophic risks and the effects of environmental liability on accident prevention in Germany. The second part included an analysis of insurer rating transitions with different economic and industry cycles, a contribution on deregulation, insurance supervision and guaranty funds, as well as an article on derivative hedging and insurer solvency in Taiwan. The last part is a retrospective view on what The Geneva Risk and Insurance Review has brought to the study of insurance in high academic circles.
- The October 2010 issue (GPP 35(4)) was a Special Issue on Health, edited by Christophe Courbage, Research Director of the Health and Ageing and Insurance Economics Programmes at The Geneva Association. The articles touch upon the following subjects relating to health in insurance: risk-type concentration and efficiency incentives; risk equalisation in Ireland and Australia; prescription drug coverage and Medicare spending among the U.S. elderly; healthcare reinsurance and insurance reform in the United States; analysing adverse selection and moral hazard in the Iranian health insurance market; evaluating the sustainability of the medical insurance scheme for urban employed individuals in China; the impact of the introduction of the social long-term care insurance in Germany on the financial security assessment in case of long-term care need; and the influence of health on early retirement among men in Britain and Germany.
- The December 2010 issue (GPP 35(SC1)) was a supplementary issue focusing on insurance in Asia, as this is a fast growing market and a dynamic region with great potential. There are also more and more Asian contributors to the journal. All of this brought us to the conclusion that The Geneva Association absolutely needed to publish this supplementary issue. Katsuo Matsushita, the Liaison Officer for Japan and East Asia of The Geneva Association, wrote an Editorial, summarising the state of insurance today in the region and its potential for growth. The

discussed topics in the subsequent articles include: whether the design of bonus-malus systems is influenced by insurance maturity or national culture, using Asian evidence; the impact of corporate governance on the efficiency performance of the Thai non-life insurance industry; a discussion on the new Korean defined contribution plan framework, to enhance retirement income security; an examination of premium rating in Taiwan automobile insurance; and determinants of the household demand for insurance, using the case of Korea. The issue also includes a special contribution from The Geneva Association on the Asian view of the global debate on climate change, stemming from The Geneva Association's 37th General Assembly.

- The January 2011 issue (GPP 36(1)) contains a new contents page layout in line with other Geneva Association publications. It features first a tribute to the founder of The Geneva Association, Fabio Padoa, written by the Former Secretary General of the Association, Orio Giarini on the occasion of his upcoming 100 years of age and of the 40th anniversary of The Geneva Association (also featured on page 11). The second part of the issue is devoted to operational issues in insurance: on the valuation of investment guarantees in unit-linked life insurance from a customer perspective; liability-driven investing for life insurers; corporate, product and distribution strategies in the European life insurance industry; a comparison of bancassurance and traditional insurer sales channels; and the impact of liberalisation and market concentration on performance of the non-life insurance industry, using evidence from Eastern Europe. Finally, this issue showcases the two Geneva Association/IIS Award-Winning papers, on management strategies in multi-year enterprise risk management, and on insurance, systemic risk and the financial crisis.
- Papers in the April 2011 (GPP 36(2)) issue of the journal study the issues of best-practice adoption versus innovation and their influence on European life insurers' productivity; what motivates insurers to use derivatives, using evidence from the United Kingdom life insurance industry; demutualization, control and efficiency in the U.S. life insurance industry; risk margin estimation through the cost of capital approach; a traffic light approach to Solvency measurement of Swiss occupational pension funds; value relevance of embedded value and IFRS 4 insurance contracts; and, assessing adequacy of retirement income for U.S. households, using a replacement ratio approach.

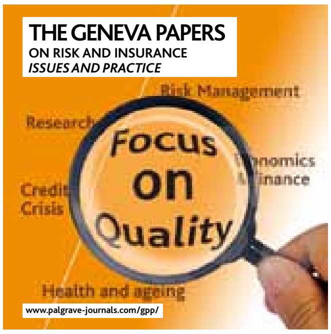
Marketing efforts

As part of the 2010/2011 visibility strategy, The Geneva Association and Palgrave Macmillan (Palgrave) have developed a citation strategy for *The Geneva Papers on Risk and Insurance—Issues and Practice* and *The Geneva Risk and Insurance Review* which has improved article awareness, article access and an increase in usage and citation, ultimately leading to a higher impact factor.

Promotional activities have been split between The Geneva Association and Palgrave, the former focusing efforts on the industry, and the latter on the academic community. A new marketing flyer was produced at the end of 2010, using a "magnifying glass" theme, with the thread line "Focus on Quality". This is being used for internal mailings, for direct mail marketing and at conferences. Marketing in 2010 focused on promotion of The Geneva Association through two newsletters and the "magnifying glass" leaflet, promoting special issues to increase usage and citation, getting authors to recommend the journals to librarians and setting up online membership subscription for EGRIE. The selection of free sample articles for both journals on the Palgrave websites has now been updated to highlight both popular articles and articles that can bring a substantial

Publications

contribution to today's research in insurance economics in our opinion.



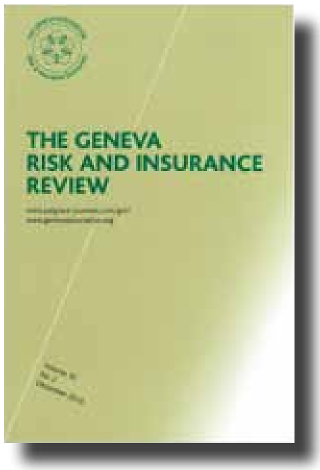
Two newsletters promoting Geneva Association activities were sent out to academic contacts of both journals' publisher, Palgrave: one in early 2010, and one at the end of the year.

There were also targeted campaigns around two very special issues of *The Geneva Papers on Risk and Insurance—Issues and Practice.* Indeed, the October 2010 Special Issue on Health and the December 2010 supplementary issue focusing on insurance in Asia benefited from special emailing campaigns to Palgrave's Atlas contacts in the fields of health, insurance, finance, social policy and health economics, and Asian Business and Management contacts respectively. The Health and Ageing issue was also promoted in Palgrave's October Economics e-newsletter.

Much of the promotional activity for *The Geneva Risk and Insurance Review* focused on setting up the EGRIE membership and communicating on it.

The Geneva Risk and Insurance Review

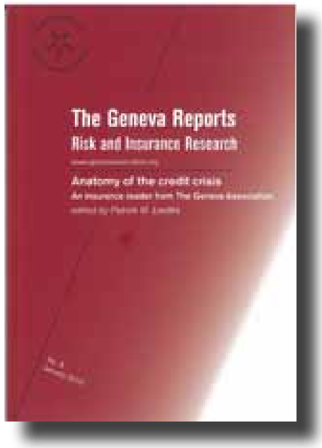
The Geneva Risk and Insurance Review targets academics and university scholars in economics. The Review is published by Palgrave in annual volumes of two issues. Its purpose is to support and encourage research in the economics of risk, uncertainty, insurance and related institutions by providing a forum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



The journal utilises Palgrave's industry-leading Advance Online Publication (AOP) service. These AOP articles are fully citeable, as Palgrave publishes only the final versions of papers, and they can be referenced as soon as they appear on the AOP site, using the digital object identifier (DOI).

The Geneva Reports

The Geneva Reports Series tackles issues of strategic importance to the insurance industry that warrant special attention and particular analysis. The series is published on an "as appropriate basis" and is available both in printed and electronic versions.



Newsletters

Seven newsletters on the main research activities, as well as on World Fire Statistics, have been published throughout the year. They are published biannually, except for the World Fire Statistics Information Bulletin which is annual. They were disseminated in hard copy and in the form of e-newsletters.

Publications

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.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Insurance Economics

Risk Management

The *Risk Management* newsletter 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.


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Risk Management

Four Pillars

The newsletter of the Research Programme on Social Security, Insurance, Savings and Employment was initiated in 1985, and provides information on research and publications in this area. It also covers themes linked to the life insurance sector.


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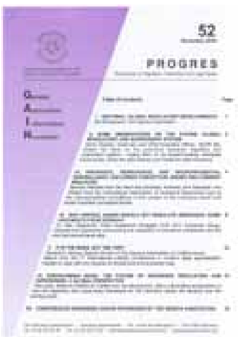
The Four Pillars

PROGRES

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, supervision as well as other legal aspects.


52

PROGRES

Health and Ageing

It seeks to bring together facts and figures linked to issues in health, and to try to find solutions for the future financing of health and the role that insurance solutions can play in them.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Health and Ageing

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.


7

Insurance and Finance

World Fire Statistics

Published annually, this newsletter presents statistics on national fire costs from over 20 leading countries in an effort to persuade governments to adopt strategies aimed at reducing the cost of fire.


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World Fire Statistics

Etudes et Dossiers

Etudes et Dossiers are the working paper series of The Geneva Association. These documents present intermediary or final results of conference proceedings, special reports and research done by The Geneva Association. Where they contain work in progress or summaries of conference presentations, the material must not be cited without the express consent of the author. Most of these documents are available freely on The Geneva Association's virtual library, except for those in restricted use, which remain in the private area.

Publications

All documents produced in an *Etudes et Dossiers* from conferences that The Geneva Association organises are available on The Geneva Association's website, in the private area, within the week following the conference. This ensures swift dissemination of information among conference attendees and has received much positive feedback. This system also means that each person responsible for a conference is more systematic and timely in collecting conference material, which speeds up the production process.

For conferences co-organised by The Geneva Association or organised by an external source, the *Etudes et Dossiers* are produced directly in the virtual library.

The *Etudes et Dossiers* appear at irregular intervals about 10-12 times per year. Distribution is limited. Hard copies are automatically sent to all of The Geneva Association's members.

Etudes et Dossiers published since May 2010 to April 2011:

- No. 360 / May 2010

26th PROGRES International Seminar, Global Regulatory and Supervisory Repair: Aligning National Interests and International Necessities, Glion-sur-Montreux, Switzerland, 15-16 April 2010

- No. 361 / June 2010

The 8th ART of CROs, Annual Round Table of Chief Risk Officers, Lisbon, Portugal, 29-30 April 2010

- No. 362 / August 2010

6th Insurance and Finance Seminar of The Geneva Association, London, 14-15 December 2009

- No. 363 / August 2010

10th CEO Insurance Summit in Asia, Singapore, 23-25 March 2010

- No. 364 / October 2010

M.O.R.E. 24 Seminar, Modelling and Mapping Risks (MMR), Bermuda, 24-25 June 2010

- No. 365 / November 2010

5th Chief Risk Officer Assembly, Navigating The Storm. Risk Management During an Economic Crisis, Rüschlikon, Switzerland, 11–12 November 2009

- No. 366 / December 2010

The 2nd Climate Change and Insurance (CC+I) Seminar, Climate Change: Opportunities for Latin American Insurers?

São Paulo, 27-28 September 2010

- No. 367 / January 2011

7th International Liability Regimes Conference of The Geneva Association, Exploring Environmental Liability: An Open Flank for Insurers and Their Clients, London, 19-20 October 2010 & 12th Meeting of The Geneva Association's Amsterdam Circle of Chief Economists, Insurance and The Credit Crisis, Amsterdam, 10-11 February 2010

- No. 368 / January 2011

7th Geneva Association Health & Ageing Conference, U.S. and French Long-Term Care Insurance Markets Development, Paris, 18-19 November 2010

- No. 369 / February 2011

World Risk and Insurance Economics Congress, Singapore, 25-29 July 2010

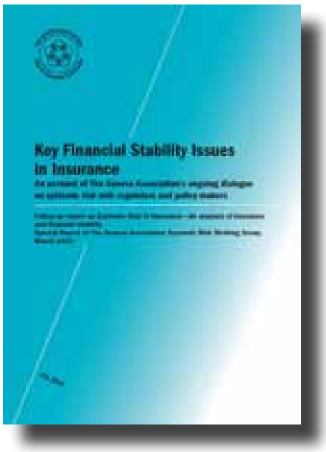
- No. 370 / March 2011

6th Chief Risk Officer Assembly, A Vision for Risk Management in the 'New Normal', Munich, 24-25 November 2010.

Publications

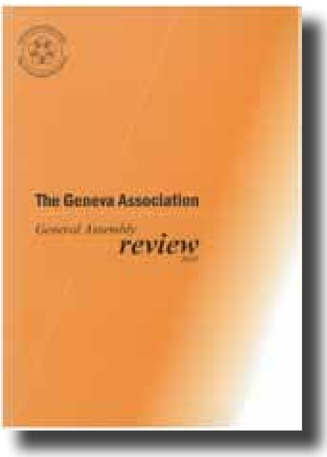
Special reports, monographs, books and co-publications

Key financial Stability Issues in Insurance—An account of The Geneva Association's ongoing dialogue on systemic risk with regulators and policy-makers, Follow-up report on Systemic Risk in Insurance (July 2010)



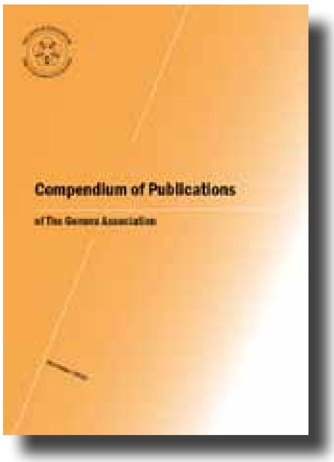
This report is based on a series of background papers and special presentations on systemic risk in insurance created between March and June 2010. It summarises the insurance industry's thinking—as advanced and crystallised by The Geneva Association—on these areas which include both corporate activities (e.g. asset management) and regulatory measures (e.g. crisis resolution mechanisms).

The Geneva Association General Assembly Review 2010 (July 2010)



This review is a retrospective on some of the key discussions at The Geneva Association's 37th annual General Assembly, the most prestigious gathering of insurance CEOs worldwide. Comprising essays by CEOs, Chief Regulators and leading commentators, it is intended to provide an insight into the General Assembly and some of the strategic issues discussed by this key forum for insurance leadership. Subjects include systemic risk regulation, climate change, developments in liability and law, demographics, as well as opportunities open to the industry.

Compendium of Publications of The Geneva Association (November 2010)



This compendium, which has each and every publication that The Geneva Association has developed over the past 35 years, has been entirely reworked to reflect the Association's current publications format and layout. It contains all information on publications by type of publication and by anti-chronological order. It is accessible at *http://www.genevaassociation.org/PDF/BookandMonographs/GA2010-Compendium_of_Publications_rev%20(2).pdf* . It is updated on a regular basis.

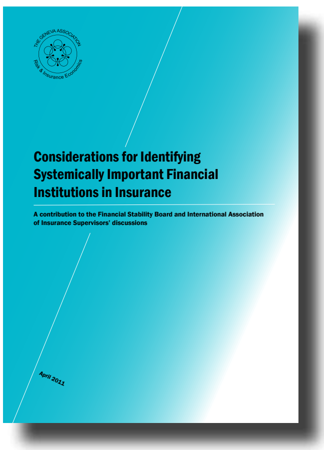
The Geneva Association's Climate Change and Insurance Project—International Contacts and Links (November 2010)

This document, updated annually, contains information on special international insurance

Publications

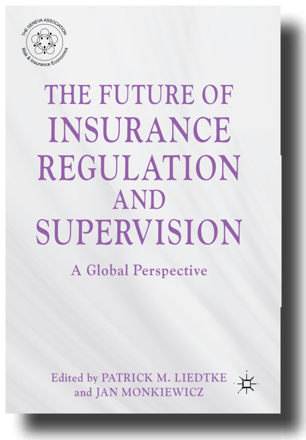
industry initiatives, intergovernmental organisations (IGOs), non-governmental organisations (NGOs), academic centres and research institutions working on climate change issues from the economic or multi-disciplinary perspective. They are mostly observer organisations from the sessions of the United Nations Climate Change Conferences and organisations with which The Geneva Association has ongoing relations, but the list also includes contributors to The Geneva Report No. 2, *The insurance industry and climate change—contribution to the global debate* .

Considerations for Identifying Systemically Important Financial Institutions in Insurance—A contribution to the Financial Stability Board and International Association of Insurance Supervisors' discussions (April 2011)



Edited by Daniel Haefeli, Head, Insurance and Finance, The Geneva Association and Patrick M. Liedtke, Secretary General and Managing Director, The Geneva Association
This report is based on a series of background papers and special presentations on systemic risk in insurance created between March and June 2010. It summarises the insurance industry's thinking—as advanced and crystallised by The Geneva Association—on these areas which include both corporate activities (e.g. asset management) and regulatory measures (e.g. crisis resolution mechanisms). The respective research was conducted by member companies of The Geneva Association's Systemic Risk Working Group: Allianz, Aviva, AXA, MetLife, Munich Re, and Swiss Re, as well as The Geneva Association itself. As such, this report constitutes a further development of the analysis of the role of insurance for financial stability and represents an integral part of the industry's position on systemic risk in insurance as originally laid out in the 26 February 2010 report.

The Future of Insurance Regulation and Supervision—A Global Perspective



Edited by Patrick M. Liedtke and Jan Monkiewicz, Palgrave Macmillan, forthcoming. The recent financial crisis has provoked a broad spectrum of regulatory observations and possible responses. Currently most of these proposals

Publications

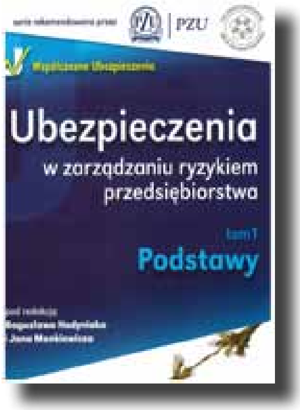
have been quick solutions to politically pressing questions and often only address parts of regulatory systems, but not the whole. At times, the result has been more confusion than clarity. Although historically wide-ranging reshaping has been a common phenomenon after the severe failure of an existing financial infrastructure, there is an important difference this time—the global reach of today's markets and enterprises. Moreover, never before have so many reforms following a banking crisis not only affected the banking sector but also other parts of the financial services sector, such as insurance, the social systems and, of course, our real economy. Written by leading academics, researchers and insurance industry experts, this book offers a diversified perspective on how the regulatory and supervisory framework for the insurance sector will develop over the coming years. It is supported by The Geneva Association, the world-leading think tank of the private insurance industry.

Insurance in corporate risk management

Although neglected in the past, insurance has acquired growing importance for the Polish economy. The insurance industry represents over 1 per cent of GDP and provides employment for almost 150 000 people.

Ubezpieczenia w zarządzaniu ryzykiem przedsiębiorstwa (*Insurance in corporate risk management)* is a series of publications coordinated by the Technical University of Warsaw and was launched to provide knowledge in the use insurance as an effective business management instrument. It was written by leading Polish industry experts.
The series is addressed to people working in risk management as well as to students in finance, insurance and management.

Ubezpieczenia w zarządzaniu ryzykiem przedsiębiorstwa (*Vol. 1 and 2*), co-edited by Bogusława Hadyniaka and Jana Monkiewicza (Vol. 1) , and Lecha Gąsiorkiewicza and Jana Monkiewicza (Vol. 2), Poltext, Warsaw, 2010, co-published by The Geneva Association and PZU.



The books are the first of a series entitled *Insurance in corporate risk management*. They provide a contemporary framework for the management of corporate insurance from a policy-holder perspective. They describe the nature of risks, types of risks faced by companies and measures to be taken to effectively manage risks. The first book also describes the process of insurance claims investigation and the role of captive insurance companies. It is a source of information of insurance products offered to entrepreneurs, specifics of insurance contracts as well as a guide to choosing the right insurance broker. The second book focuses on the application of corporate insurance in diverse activities from production undertakings to commercial companies, as well as banks, health care centres, local government units and non-profit organisations or various service providers.

Ubezpieczenia. Podręcznik akademicki (Insurance Academic Manual), co-edited by Jerzy Handschke and Jan Monkiewicz, Poltext, Warsaw, 2010, co-published by The Geneva Association and PZU.
In recent years the insurance business has undergone numerous changes. New products, new risks and new methods of risk management have emerged. The relations between insurance, banks and capital markets have become much closer. All these changes have made it necessary to discuss the following issues: risk, its quantification and classification; insurance

Publications

as a financial instrument, insurance regulation, insurance products, risk management, insurance companies, financial management, controlling, budgeting, financial analysis and reinsurance, insurance in financial markets, globalisation of the insurance system, insurance supervision, insurance coverage guarantee, as well as insurance in the social security system. This handbook was prepared by outstanding specialists from major Polish academic centres and is recommended by the Polish Finance Committee of the Polish Academy of Science for use in higher education institutions. The book is also addressed to the wide range of insurance professionals, providing comprehensive theoretical and practical knowledge.

The Geneva Association Online

The website is a central pillar of The Geneva Association communications strategy. It is a permanently available "one-stop shop" for publications, newsletters and other materials produced by the Association as well as being a key means of articulating the nature and purpose of the organisation to outside audiences. Structured to provide information on the research programmes and other activities of the Association, the site also provides access to the library of Association research publications—the most recent in the research section and the body of work in the virtual library, special focus area pages as well as the Association conference programme.

In mid-2010 a new news and media section was added to the website owing to the increase in the tempo and breadth of communications and publications produced by the Association over the last two years. It has been redesigned to host a wider variety of media collateral such as multimedia (e.g.: webcasts, broadcast media), articles and links to published pieces, as well as the series of reports and letters produced by the Association. The new page provides a more user-friendly and practical organisation of media materials.

Press coverage over the last year has increased, particularly with the Association's public position on financial stability in insurance.

Document digitisation—Update

Last year, *The Geneva Papers on Risk and Insurance—Issues and Practice* was partially digitised and online. This year, we are pleased to say that this process is now complete both for this journal and for *The Geneva Risk and Insurance Review*. Visitors to our website now have access to both journals' articles, from the inception of these in 1976 (they were then merged into one single journal, *The Geneva Papers on Risk and Insurance*, until 1990, when they split into *The Geneva Papers on Risk and Insurance* and *The*

New News and Media webpage

The Geneva Association Online

Geneva Papers on Risk and Insurance Theory), all the way to a three-year moratorium, where the publishers, Palgrave Macmillan, maintain copyright.

Also, this year, all of the older newsletters (these started in 1984) of The Geneva Association have been put online and are freely accessible to our readers.

We have the aim of making our virtual library an extensive repository of information on insurance, both for academics and for professionals in the field, so we will continue to add documents as they are developed or digitised.

New webpages online

The World Risk and Insurance Economics Congress (WRIEC) was established to stimulate corporate awareness and interest in risk-related research and to provide a forum for networking among academics and industry and government professionals worldwide. It takes place every five years. Given how well-received it was in 2010, it was decided to provide a webpage for it on The Geneva Association's website.

Also, to make it easier for visitors to get a glimpse at upcoming events, and yet still be able to navigate through past ones, a Previous Conferences and Events webpage was created and put online, providing past programmes and other materials of open conferences that have taken place.

Useful links

This section considerably developed in the past year. The Useful Links section contains reciprocal links to affiliated organisations, networks, professional organisations and research centres, journals, international industry associations, intergovernmental and international organisations, and non-governmental organisations. At present, there are 120 links related to The Geneva Association and its work on our website. We hope that these will encourage collaborative efforts with other organisations and companies, as well as provide visitors to our website a wider view of insurance stakeholders and readings that are available.

Twitter and LinkedIn accounts

The Geneva Association is now present on LinkedIn and on Twitter. Through these social media outlets, The Geneva Association can access a wider audience, and we make its voice count when it comes to showing the benefit of insurance to the economy and to society. Also, it is yet another opportunity for dialogue with the media, insurance companies and consumers, and to showcase The Geneva Association's work.