



# Risk Management Newsletter

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## Editorial

### Perception, Assessment and Management of Risks and Opportunities; Different Approaches to Dealing with Risks

*by Walter R. Stahel<sup>†</sup>*

This issue of the Risk Management Newsletter looks again at the changing opportunities and risks in today's world, and its impact on insurance. We hope you will enjoy reading it and look forward to your comments.

*"I am alarmed by the direction in which mankind is evolving. We go through a time of riots, of transition and change. Uncertainty, inequality and intolerance are advancing. Governments spend huge sums for weapons and invest less money into people."*

Introductory remarks of a published statement by Ban Ki Moon.<sup>1</sup>

This editorial touches upon many of the topics mentioned by the United Nations (UN) Secretary-General, providing explanations and sketching solutions with regard to insurance's role. It also supplies some explanations for the "ain't it awful" attitude popular with many politicians who would have the power to present visions and apply them to improve the state of the world—but do not do so.

It will specifically consider two recent years which changed the world:

- 1989, when the fall of the Berlin Wall created the illusion of one world, described in 1992 by Francis Fukushima in his book *The End of History*. This event overshadowed the structural changes triggered by the events on Tiananmen Square, the rise of religion as a new global power and the fact that "the lights went out in Teheran, Kabul, Beirut." In 1989, Ayatola Khomeiny pronounced a fatwa against Salman Rushdie and his book *The Satanic Verses*.
- 1998, when a silent revolution started the shift to private ownership in The People's Republic of China (PRC), creating a freer market, and huge and rapidly growing opportunities for the private sector, including insurance. The 2010 Tort Law of the PRC is a consequence of the shift of 1998. However, a first analysis shows that Western insurance products cannot be used in a copy-paste approach, but need to be adapted to local conditions (see the Guest Editorial on page 7).

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<sup>1</sup> *Neue Zürcher Zeitung*, 4 October 2012, p. 20, opinions. <http://www.nzz.ch/meinung/debatte/wohl-der-menschen-als-hoehstes-gut-1.17662306>

The full significance of the events of these two key years becomes visible now; it is linked to the absent global discussion on the roles of democracy and religions. And it shows that certainty cannot be constructed; mankind will have to live with the advancing uncertainty deplored by Ban Ki Moon, who ignores the situation foreseen by Huntington in his 1992 lecture, *The Clash of Civilizations*.<sup>2</sup>

- The 1989 one-world illusion is built on European environmental and social values. Its translation into the idea of a top-down global governance perspective, but without global democratic legitimacy (through, for instance, a public vote), is thus not sustainable.
- Salman Rushdie, who grew up in the spirit of the 1968 European social revolt, idealised the solidarity vision of global world socialism and predicted a decline of religion. He today admits that “we looked the wrong way”—not seeing the religious juggernaut heading toward them.<sup>3</sup>
- The Chinese techno-economic revolution (industrial, IT and Internet as a package) has created a bottom-up movement of microblogs, which comes close to direct democracy on local issues. Millions of individual pieces of information crystallizing into concrete local actions have started to change China. For unlike Internet and iPhone apps, this revolution is outside the government’s supervision.

All of these developments have created new perspectives, risks and opportunities, and new visions and illusions, some of which will be discussed in this editorial as well as in the section “Background Information” on page 10 of this newsletter.

### **The global power perspective—based on equality and solidarity?**

National sovereignty is the basis for Public International Law (PIL). But at the same time, sovereignty makes it impossible to impose the application of PIL, even with force. The first attempt to create a PIL goes back to the treaties of Munster and Osnabruck in 1648, known as *Westfälischer Friede*, which was supposed to put an end to religious wars. But the PIL concept has always lacked the people’s voice, democracy. In 1762 already, Jean-Jacques Rousseau coined the term “people sovereignty”, as a reaction.

The League of Nations, created in 1919 after World War I, was another attempt to create peace through binding PIL after a major European war, but it could not prevent World War II and was dissolved.

The UN Charter and the creation of the UN Security Council in 1945 froze the political map and the rules for the future in another attempt to create peace. But both institutions were children of the winners of WW II and still dominated by European powers and the U.S. Can freezing a situation provide stability for the future? Recent conflicts like the Falklands War and the present hands-on discussion between Japan and China about the sovereignty of small islands put this thesis into doubt.

In 1986, the Law of the Sea was a winning proposal by and for nations with access to the sea, such as the U.S. and Japan. But it ignored the rights of landlocked countries and already incorporated a future clash with the vision of the oceans as a global commons in a world of inclusive solidarity and equality promoted by the UN today.

Global Governance (GG) is a concept born after the 1989 revolution, which made the distinction between Eastern and Western blocks disappear. But is GG, administered by the UN, a real alternative to national sovereignty? In the third millennium, GG is increasingly challenged by religion and a bottom-up power—people. In the People’s Republic of China, microblogs have become a major way for individuals to join forces for domestic changes, bypassing official powers and controls; Chinese consumers attacking Japanese factories and refusing to buy Japanese cars, rather than any international treaty, may decide the outcome of the disputed ownership of a few small islands.

GG of the global commons has failed to preserve the atmosphere (e.g. the Kyoto Protocol) or fish stocks in the oceans or biodiversity. The ownership of resources by nations versus corporate or foreign ownership (disputes over mining companies on several continents, over agricultural land in Africa, or

<sup>2</sup> Huntington expanded his thesis in *The Clash of Civilizations and the Remaking of World Order* 1998, Simon and Schuster.

<sup>3</sup> “Wir schauten in die falsche Richtung” (“we looked the wrong way”); interview with Salman Rushdie, *Neue Zürcher Zeitung*, 5 October 2012, p. 51. <http://www.nzz.ch/aktuell/feuilleton/literatur/wir-schauten-in-die-falsche-richtung-1.17665681>

the right to Rare Earth Elements (REE) produced mainly in China) may finally be decided by people power rather than international courts.

As GG has been unable to “deliver the goods”, the UN is now pushing for voluntary inclusive actions that unilaterally adopt UN values, such as the Principles of Sustainable Insurance (PSI) based on the Environmental, Social and Governance (ESG) issues. But are these values globally accepted?

In addition, a Global Commercial Governance has appeared, most prominently through Facebook and Google Street View, violating, for instance, several German laws on consumer data protection and possibly U.S. antitrust laws.

### **The global value perspective—based on tolerance?**

Without global values, there can be no global power perspective. But as values are based on culture, and culture is based on regional or religious values, this path may be a dead end. The clashes following a silly amateur movie on YouTube featuring the prophet Mohamed have highlighted the clash of values and the global power of the Internet. Tolerance and free speech—as anchored in democracy and the U.S. constitution have clashed with the rigidity of Islamic law. A religious global rule?

In Europe, NGOs have replaced the Christian religion, but instead of the Ten Commandments, believers are now faced with hundreds of Environmental, Social and Governance (ESG) principles—the number and diversity of which are growing.

Buddhism claims that tolerance and mediation are the best approach to peace. But extreme Muslims have burned down more than 20 Buddhist temples in Bangladesh following the discovery of an offending cartoon on Internet, supposed to have been posted by a Buddhist. The German town of Hamburg has chosen a different approach to tolerance, imposing mandatory introduction to Islamic culture for all its school children, waiving the rule of Christian faith as the dominant local culture. Will this strategy lead to tolerance on both sides?

When Ban Ki Moon complained that inequality and intolerance are advancing, what development did he have in mind?

Risk is a construct<sup>4</sup> and so can values be a construct. The role of the European media in reporting on the nuclear accident in Fukushima has clearly shown this fact (see article on page 10, for details). Not only microblogs, also traditional media have the power to change the world, similarly to the Chaos theory's example that a butterfly flapping its wings in the Amazonas region can trigger a windstorm in Europe. But in contrast to butterflies, media may be biased, following their own (political) agenda.

In addition, there are many possibilities of a clash between values and the sovereign powers of nation states. While in the past, governments were the guarantors of property rights, both physical and intellectual, nation states are increasingly becoming dealers of stolen intellectual property. The German and the U.S. governments have bought confidential data, which employees of Swiss banks had stolen from their employer's computer system. With more than US\$100m paid to Bradley Birkenfeld, a former banker, the U.S. has out-paid Germany by a factor of 10. But while traditionally this business was limited to spying and secret services covertly buying files on microfilm, finance ministers now openly advertise to buy stolen data. And data theft is fuelled by technological progress, as huge volumes of data can be copied instantly and stored on a memory stick or flash memory—data theft has become a child's play, with no limits. The same governments will, however, vigorously defend intellectual property rights if a foreign company “adopts” useful technologies from a domestic company; witness Apple versus Samsung on smartphone technology.

Today, there are no global values; democracy, human rights and sustainability are European value concepts. What is the role of insurance in societies based on different values? Insurance is based on trust, unlimited in time—paying premiums today for a promise in the future; life insurance may be its most extreme form. Is trust a universal value, or will we soon see Islamic insurance, Chinese insurance or at least regional interpretations by courts?

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<sup>4</sup> Vlek, C. (1996) *Risk is a construct; perceptions of risk perception*, München: Bayerische Rückversicherung Aktiengesellschaft (eds.).

## The global science and technology perspective—a suitable case for insurance?

After the industrial and electronics revolutions, Internet is the third techno-commercial revolution to promise a new world of opportunities: social networks, online banking, microblogs, smartphones, automated trading systems, instant information, cloud computing, working from home, crowd mapping—promises of unlimited opportunities in a risk-free world.

On the dark side, we have cyber-attacks and cybercrime, data theft, new hazards such as “apple picking” in public places,<sup>5</sup> new moral hazards such as large numbers of consumers losing their smartphones precisely when a new model comes into the shops. Crooks’ lives are made easier by developments such as Google Street View, which also lists all WiFi routers, allowing hackers to work under a false identity by exploiting unsecured WiFi addresses, and burglars preselecting suitable properties from a distance without the risk of being spotted by surveillance cameras or security personnel. Manufacturers and distributors can integrate spy software and hardware items into products, such as a scanner linked to a mobile communication device installed in document shredders.

Governments are active on both sides: the EU Commission has declared that Google has a duty to protect users’ privacy, or face heavy fines; U.S. agencies are suspected of being at the origin of the Stuxnet virus, which attacked IT servers of industrial plants, especially in Iran. Iran agencies are suspected to be at the origin of the Shamoon virus, which crippled U.S. banks in the autumn of 2012.

The two faces of science can also be illustrated, on the one hand, by the crowd mapping in Haiti, which enabled rapidly producing a detailed map of Haiti after the 2010 quake in order to help rescue and post disaster management efforts; and, on the other, by the case of a crowd rioting in India caused by a concerted flood of short text messages (SMS).<sup>6</sup>

While professional users may feel better protected, many of the opportunities that attract young users have an unlimited loss potential. “Bitcoin”, an open-source, peer-to-peer digital cash system launched in 2009, has a virtual currency scheme, even if experts did warn of possible shortcomings. But nobody had probably foreseen the possibility of a bank robbery, which happened on 5 September 2012, when all “Bitcoin” accounts were emptied (the virtual money stolen) by an unknown actor in a single operation.

Data theft is nothing new. But when in the 1980s, Aldrich Ames, a CIA employee, passed the names of 20 double agents working inside the KGB in Russia to the CIA, he had to copy them manually from files. Electronics make this kind of actions faster, easier and more difficult to detect. Wikileaks published thousands of e-mails of U.S. army personnel and other classified documents, using digital copies. In September 2012, an employee of the Swiss secret service stole a huge amount of sensitive data from Swiss government computers, including U.S. CIA information. He was discovered because he wanted to open a numbered (anonymous) bank account.

So far, there is no quality control for crowd data, or recourse or liability for mistakes and misinformation on the Internet. In this sense, the digital world is no different from the real one—once a stampede has started, there is no way to stop it, nor ways to recover economic losses suffered.

To summarise, the events of 9/11 have taught us that information exchange is crucial to fighting terrorism, and that one has to accept certain risks in order to increase security. Yet the judgement of these risks and opportunities has to be revised frequently, as science and technology advance.

One challenge for insurers is how to get science of, for instance, climate risk as a moving target into underwriting. The other stems from such long-term products as photo-voltaic systems and LED lamps sold to private customers with a manufacturer guarantee. In the case of a manufacturer bankruptcy, a back-up guarantee by an insurer can speed-up the advancement of these promising technologies by establishing consumer trust.

<sup>5</sup> In NYC, 10,400 Apple iPads and iPhones have been stolen in 2012 so far, up by 40 per cent from 2011.

<sup>6</sup> “Mass cellphone spamming sparks huge exodus in India”, *New Scientist*, 25 August 2012, p.4.  
<http://www.newscientist.com/article/mg21528793.900-mass-cellphone-spamming-sparks-huge-exodus-in-india.html>

## The global resource perspective—a race for the best?

The early industrial society was based on the principles of specialisation and economy of scale in production processes; first it meant optimising mass production by substituting capital and resources for labour (human work); later by outsourcing and globalisation. The logic has been more production equals higher economic growth; the driver has been the “bigger-better-faster-safer” syndrome of new goods. With the shift to a knowledge society, the large majority of jobs in industrialised countries moved to services, while resource consumption is still primarily linked to manufacturing.

People as a sustainable resource are underdeveloped. Harnessing the potential of young generations for both academic (university studies) and manual (apprenticeship) skills should be an obvious priority for politicians. In addition, new human resource pools can be exploited, such as the experienced elderly. With global demographic change, the race for talents<sup>7</sup> is heating up and shifting geographically, as the quantity and quality of labour will change. According to OECD figures, in 2020 50 per cent of all new PhDs will come from China and India (29 and 21 per cent respectively).

The exploitation of natural mineral resources has traditionally been based on the purity of virgin ore, easy access, cheap labour and lowest costs. Economy of scale was crucial, machines replaced labour for most tasks and small mines were closed. But the globalisation of resource production meant longer transport distances and possible fights over exploration rights, and may lead to a rethinking. With increasing commodity prices and higher extraction costs, the rules of the game could change. New types of “mines” could gain interest, such as “mining the urban ore”—food waste for biofuels, end-of-life goods for remanufacturing, re-mining the waste heaps of old mines.

In industrialised countries with saturated markets, a circular economy is emerging, shifting the focus from production to stock optimisation, enabling the creation of a low-carbon labour-intensive regional economy with a focus on stock instead of flow management. The higher labour costs are more than compensated by lower procurement costs for resources. A recent study<sup>8</sup> has estimated an annual saving potential of US\$380bn for the industrial sectors of the EU, even if the model used covered only half the EU industrial sectors. Environmental benefits stem from the preservation of the embodied energy, greenhouse gas emissions and water, which are saved in reuse, repair and remanufacturing.

Economic growth in a circular economy is decoupled from resource throughput; growth is created by an increase in the quality of the stock, rather than the quantity of the flow. The U.K. and U.S. governments are looking into developing the circular economy in order to reindustrialise their economies, remanufacturing goods locally instead of importing manufactured goods from abroad.

Insurance can contribute to, and profit from, a circular economy by repairing instead of replacing goods and parts, from supply chain to supply circles. U.K. insurers have already acquired experience in this field, for instance through their Motor Insurance Repair Research Centre in Thatcham. These pioneers of research into product-life optimisation have been motivated by financial savings in car repairs, not product-life extension or technical innovation. Yet, they have come up with highly innovative techniques, such as skin replacement panels that use more labour but greatly reduce repair costs and waste compared to traditional techniques.<sup>9</sup>

A circular economy is regional; the risks linked to global supply-chains, and the business interruption claims following the 2011 tsunami in the Sendai region and the Thai floods in Bangkok, will be largely mitigated by a shift to a circular economy. Manufacturers retaining the ownership of their goods (and embedded resources) by selling goods as services would reinforce a shift to a circular economy.

Water may be the ultimate resource as there is no known substitute. As the extraction of ground water may be responsible for almost half the average sea level (a.s.l.) rise, this exploitation could be increasingly criticised. The global governance attention might thus shift from energy efficiency and CO<sub>2</sub> emissions to a more efficient use of water, fostering the application of drought-resistant GMO plants.

<sup>7</sup> In the article “Immigrant entrepreneurs—The Chilecon Valley Challenge”, *The Economist* talks of a war for talents (13 October 2012, p.15). <http://www.economist.com/node/21564564>

<sup>8</sup> Ellen MacArthur Foundation (2011) *Towards the Circular Economy—Economic and business rationale for an accelerated transition*. A study in cooperation with consultants McKinsey & Co. <http://www.ellenmacarthurfoundation.org/circular-economy/circular-economy/towards-the-circular-economy>

<sup>9</sup> Stahel, Walter R. (2010) *The Performance Economy*, Basingstoke, U.K.: Palgrave MacMillan p.221.

## The global pension perspective—the elderly as resource with experience?

In the industrialised world, the elderly are growing in numbers; in Germany, for instance, half the population will be 65 or older by 2050. This means not only an increase in costs (long-term care, for instance), it will also shift priorities in the political landscape—the elderly will soon have a majority in future elections.

A recent UN report<sup>10</sup> stated the priorities of coping with demographic change as financial security for the elderly by (private) pension schemes and indiscriminate access to work for the elderly. Is this an invitation for insurance? New challenges arise from the factor of population “density”. With a decreasing absolute population, the mobile young people are increasingly attracted to urban centres, which accelerates the relative ageing of the rural populations. In turn, this entails a reduction of public services in rural areas for health and utilities services, mobility and culture, which means increased per capita costs for operating and maintaining vital infrastructure, such as water supply, sewage treatment and public transport. From an insurance perspective, the elderly have different needs, such as individual mobility at an advanced age in rural areas and the need for affordable health insurance, but have different risk profiles from the average clients.

On 3 and 4 December 2012, The Geneva Association will organise a conference in Geneva on the risks and opportunities of the ageing populations—*The Four Pillars: The Next 25 Years*. For more information, see the programme on page 19 of this newsletter. If you would like to participate, contact the event manager Barbara Botterill at [barbara\\_botterill@genevaassociation.org](mailto:barbara_botterill@genevaassociation.org)

From a governance perspective, global mass migration of younger people, into particularly Europe, could mitigate the financial problems of pension systems but lead to a clash with national sovereignty and dominant culture. African and Asian refugees into Southern Europe are already putting a huge strain on the European Union’s internal immigration policy and governance.

Looking back at the paradigm shifts listed in the editorial of the May issue No 51 of the *Risk Management Newsletter*, we can see that the developments have since reinforced these shifts.

**Liability dynamics**—see the following Guest Editorial by Richard Murray. China’s shift from Maoism to private ownership and changes in governance create a new market for most insurance products, including liability. Public authorities in China routinely impose mandatory liability insurance on the private sector to avoid claims against the state. The highest EU court has reinstated the priority of passenger protection in the Air Passenger Rights Directive, rejecting reasons of force majeure and technical imperative used by airlines to refuse payments.

**Rising commodity prices**—the theft of resources at all levels, production, consumption, utilisation and waste is rapidly increasing as a result. Droughts in the U.S. Corn Belt, Brazil and India have led to rising world food prices. The U.S. Security and Exchange Commission’s demand for ESG certificates for virgin resources will increase the prices of virgin material.

**Societal inequalities**—hunger demonstrations in Greece and increased poaching in Germany’s private forests are signs that this issue is getting worse. Promoting a circular economy—creating local jobs, a higher resource security—is not yet on the political radar screen of policymakers, despite high unemployment in many countries.

**The emergence of new regulatory and quasi-regulatory risks**—if the public sector cannot do it, then the private sector must. It can be expected that the shift of burdens and tasks from the public to the private sector will intensify on all levels, based on the deep pocket theory: higher national taxes on enterprises and a socialisation of insurance on a global level.

To close the circle: Ban Ki Moon’s deception, quoted at the beginning of this editorial, could be a sign that Huntington’s perspective is winning over the UN’s vision of a Global Governance (see the diagram on page 12), rather than a sign for a general deterioration of values and future options.

All the issues and topics sketched out above embody opportunities for insurance companies. We hope The Geneva Association will be able to permanently contribute to this discussion and the quest for new insurance products to improve the quality of life of its customers.

<sup>10</sup> UNFPA and HelpAgeInternational (2012) *Ageing in the 21<sup>st</sup> Century—A Celebration and A Challenge*. <http://www.helpage.org/resources/ageing-in-the-21st-century-a-celebration-and-a-challenge/>

This issue of the *Risk Management Newsletter* mentions some of the topics that we propose to study more closely in the future—the future of Risk Management will be lively and interesting. Let me end with the traditional Season's Greetings:

**On behalf of all the staff of The Geneva Association, I wish you  
a Merry Christmas and a happy and successful New Year!**

We hope that 2013 will bring you happiness and personal fulfilment and be a year which will provide new insights on how to successfully manage risks and the uncertainty of everyday life.

### *Guest Editorial*

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## **The Social and Insurance Implications of the New China Tort Law**

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*by Richard H. Murray<sup>+</sup>*

Not long ago, it would have seemed curious to associate the subject of tort liability law with a commentary on conditions in China in the same sentence, much less as the focus of an article. China has not been viewed as a bastion of the rule of law as the concept is viewed in the West. Images of Tiananmen Square dominated our impression of the role of law. China is not a society in which lawyers are plentiful or influential in setting public policy. The Chinese court system is underdeveloped by Western standards, and there are no training or even legal qualifications for appointment as a judge in the legal system. How could a system of compensation based on the Western traditions of liability rooted in the Anglo-American traditions of tort law arise in these conditions? Indeed, why would there be any reason to do so?

Nevertheless, what is commonly referred to as The New China Tort Law was enacted as part of the statutory law of the People's Republic of China (PRC) in July 2010 after long and thoughtful development as an instrument of public policy. The conceptual framework of the law and its terminology are drawn from the Anglo-American model. Its use and effects have yet to be developed through widespread application. But its potential to establish tort law as a social instrument is vast and should not be overlooked by Western companies doing business in China, particularly insurers offering commercial and personal lines coverages in China.

The subject is one that I anticipate will receive widespread attention and trigger numerous books in the West during the coming decade, as the use of the China Tort Law becomes manifest. The objectives of this early commentary are modest. I offer views on why the PRC has adopted a Western model of compensation for injury, how the China tort law follows and diverges from our Western experience, what its policy objectives appear to be, and what insurers should consider in developing an enlarged liability market in China. To provide the necessary context for addressing these issues it will be necessary to begin with a very abbreviated description of the Anglo-American tort liability system and its role in Western society.

### **The Western tort models**

At the beginning of the industrial revolution, compensation for injury was rare and irregular. The concept of Caveat Emptor (let the buyer beware) was the social norm. It was not a great humanitarian principle, but for centuries of conquering and plundering, neither governments nor commerce gave much thought to humanitarian principles or the protection of the unfortunate. It was a condition deemed suitable for the benefit of those with power, and adequate to support such commerce as existed within small communities where buyers and sellers of goods and services were known to one another. The corollary protection for individual or business consumer was: don't do business with those who are unreliable.

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<sup>+</sup> Chairman of The Geneva Association Liability Regimes Programme.

But as the industrial revolution created distance and anonymity between parties, the demands of commerce required a mechanism for compensating victims of poor quality merchandise that would operate as a system linking with geographic reach and standards of responsibility. These roots of necessity grew into the judicially administered tort liability system of England and the common law states that grew out of the British Empire. The system was constructed to compensate for injuries only where it could be tied to fault in the actions of others. The tort liability system that emerged required that the injured party establish (i.e. bear the burden of proof) that:

- he or she had suffered harm...
- as a result of the negligence of another...
- who had a duty to protect the injured from such harm...
- in a chain of direct causation between the negligence and the injury and
- that the injury be one that had caused economic loss.

Since the system was designed to foster commerce, not humanitarian instincts, its goal was to restrict recoveries and avoid a tendency toward compensation creep. Thus there arose the doctrine of *stare decisis* (determinations of when recovery was allowed and in what quantum) were based on judicial determinations in prior similar cases. Judges became the law givers in this respect, requiring full written explanations of decisions on new fact situations for other judges to follow in similar circumstances.

The common law tort system evolved slowly and with little modification of the standards or their application. Compensation required a duty, a proven breach of the duty, which caused harm to another for which economic loss could be recovered.

The first major shift occurred in the U.S. during the 20<sup>th</sup> century, when the power of decision was placed in the hands of juries. They brought a populist mind-set to the task, a spark of preference for more liberal and generous rewards. And since juries did not write opinions to explain their decisions, award creep followed. By the end of the 20<sup>th</sup> century, the U.S. civil justice system had significantly lowered the standards for recovery, and expanded the compensable losses to include non-economic loss commonly referred to as pain and suffering. Punitive damages had also become an accepted way to punish the "tort feasers" as a form of private sector regulation of business behaviour. Not surprisingly, the U.S. model drove more awards and increased the amounts of damage. These conditions flowered in the U.S., but also influenced common law tort systems elsewhere.

An even more brief description of the compensation systems of continental Europe is needed to set a framework for examining the position in China. Countries following the European civil law model embedded compensation for injury in state-supported schemes rather than through the judiciary. Those schemes largely focused on the injury and not the cause. They also set statutory limits on the amounts that could be recovered for broad categories of injury. The result was compensation for more victims, but generally at a lower level of recovery. The commercial necessity for compensating injuries was similar to that of the common law, but applied through different cultural lenses. In this all too abbreviated summary, it seems fair to describe the common law system as behaviour control and the civil law system as injury remediation throughout society.

In recent years the European Union and many Member States have been exploring a form of private sector tort system, as a means of dealing with economic and demographic conditions that cause state sponsored compensation schemes to no longer be affordable. While borrowing from some of the U.S. tort practices, there is an effort to place the resolution processes in the hands of arbitrators or ombudsmen to prevent excessive awards.

### **The new China tort law**

The 2010 Tort Liability Law is brief, by Western standards, comprising 12 chapters and 93 provisions. In the English translation it is less than 30 pages, but with a very broad scope of potential application.

The law needs to be viewed in the sweeping social and legal changes since the great revolution that brought an end to the Maoist era and the slow evolution of a capitalist society. Under Chairman Mao, there had been no concept of private property. Consequently there had been no need for property insurance. Similarly, there had been no recognition of private rights, and so no need for product liability. There was no property and casualty insurance industry. Much has changed in the succeeding decades, with the formalisation of tort liability as the most recent development.



A significant portion of the law's provisions preserve and codify rights of compensation that have evolved in China since the Maoist era, including the right to be compensated for:

- motor vehicle injury;
- medical treatment injury;
- environmental harm; and
- building collapse.

These are all aspects of the Western models, under common law where the injury is attributable to fault by others, and compensable without regard to fault for legally specified amounts under civil law.

In these aspects, the China law may be a clever model for blending the features of civil and common law. The law specifies that the burden of proof for tort claims like these falls on the defendant to prove that he was not at fault. In practical terms, that may mirror the civil law absence of proof of fault, or something very close to that approach. But the China law also follows common law traditions in the absence of any stated maximum limitation on the amount of damages recoverable. There are difficulties of comprehension arising from cultural foundations and the nuances of translation. But it would not be unreasonable to view the generality of these provisions as a clever way to incorporate aspects of both Western traditions, or as a means of allowing the law to evolve flexibly as evolving public policy dictates.

The China Law also introduces several categories of potential tort liability recoveries that had previously been covered under specific regulatory forms of business behaviour control, or not recognised as recoverable causes of loss. The law does not attempt to define closely what kinds of actions or injuries are contemplated.

- Impairments to life and health: Is this intended to deal broadly with water and air pollution, or with the consequences of climate and seismic events?
- Harm to honour and reputation: Is this the equivalent of libel and slander claims in the West, or something broader?
- Protection of physical property: Is this the equivalent of Western concepts of trespass, or more encompassing?
- Impairments of privacy: Is this limited to one's own physical space, or a means of providing redress for difficulties in the use and application of communications technologies or use of the Internet?
- Impairments of intellectual property: Is this equivalent to Western forms of patent and trademark protections, or might it extend to the rapidly growing role of social networks in China?

These are business and personal issues that are typically covered by specific statutory controls in the West, with tort liability claims only occasionally relevant. By bringing them within the tort law, China has established a platform for potential compensation that is almost entirely free of constraining borders. To an even greater degree than the prior group of torts, these appear to be currently shapeless mounds of clay, legitimised by the new law as rights permitting compensation from third parties, with the requirements and amounts of potential recoveries to be shaped by law or practice as the rights begin to be exercised in the future. At the intersection of claims under these categories with evolving public policy, the China law could function with any or all of the features of the Western model. It does not seem unlikely that this is the intent.

There are other significant aspects of the new law that deserve attention.

- I have noted that it will be easier for claimants to prevail because of the shift of the burden of proof to defendants on issues like duty and fault. It is also notable that a breach of duty can be proven, even in the absence of any evidence of negligence, if the defendant has "assumed liability". An admission would constitute assumption. But so would an apology. The cultural practice of an honourable "I am sorry for your loss" also appears to constitute assumption.
- Causation is a requirement, but appears to be satisfied by a coincidence of events without showing how they were causally connected.
- Prior to the new law, only economic loss could be recovered, similar to the early phases of the common law. By specific provision in the new law, tort liability claims can recover for emotional distress (pain and suffering), for having been put in fear of harm (exposure to asbestos) and for punitive damages and deterrence (business regulation through the tort system). All remain untested thus far, but have significant potential for constructing in China the current state of tort law in the U.S.

- In those instances where the new law offers interpretive guidance, it seems directed to allow recoveries from the largest possible universe of defendants. For example, joint and several liability is explicitly enabled, as is a robust form of vicarious liability for employers and owners who may not need to be resident or present in China.

### **Observations about the new China tort law for businesses and insurers operating there**

Because the China law is still to be developed through application and practice, much of what I have said is necessarily speculative. But I turn now to even more subjective impressions, briefly stated. Clearly, I will be wide off the mark on at least some of the following. But all seem to be justified guidance for business and insurance operations while monitoring how the law is deployed.

The China tort law is more focused on the injury and resulting loss than on the causal event or behaviour. It blends the relative ease of recovery found in civil law with the unlimited potential for recovery found in common law. It is designed as a mechanism to combine broad protection of businesses and individuals with the capacity to act as a private sector regulator.

There is more emphasis on spreading damage recoveries among multiple parties than is seen in either civil or common law systems. If that is a correct interpretation, the law is designed to use the tools of the common law to achieve the socialisation of risk without passing the costs through state entities or budgets.

While use of the law is growing slowly, it is in place while the growth of a massive middle class with costlier claims is developing. It is an anticipatory provision to deal with emerging social conditions and the effects on Chinese society of an Internet-linked world in which compensation for injury is becoming a universal expectation.

The relatively under-developed legal profession and untrained judiciary are consistent with the law's objectives. Those conditions foster flexibility of outcomes, with Chinese judges functioning in a manner similar to U.S. juries.

There is reason to believe that one purpose of the law is to foster recoveries from global businesses and industries operating in China. It will be in the best interests of such entities to ensure that their global risk financing mechanisms take into account what could be a rapid escalation of loss exposure in China.

There will be a growing demand for liability insurance in China, where this sector of insurance activity has been small and growing slowly. For insurers, the next few years will be a time of opportunity.

But insurers beware—it will also be a period of underwriting hazard. Because the new China law looks a good deal like established common law rules, and with some of the insurer protective comforts of civil law, it will be tempting to use product terms and features developed in those markets. That would be dangerous. Insurers will need to study carefully the intended applications of the law, both in scope and practice, in order to develop liability products tailored to the very unique characteristics of the new China tort liability law.



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## **Background Information on Topics of the Editorial**

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### **The visible hand of journalists**

The disaster in Fukushima Daiichi has found a very different echo in European newspapers. Hans Mathias Kepplinger and Richard Lemke analysed the media reports in major German, Swiss, French and U.K. newspapers.<sup>11</sup>

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<sup>11</sup> "Gefärbte Information über Fukushima—haben Journalisten die Energiewende herbeigeschrieben?" ("tainted information on Fukushima—have journalists produced the nuclear exit?"); *Neue Zürcher Zeitung*, 25 September 2012, p. 54. <http://www.nzz.ch/aktuell/feuilleton/uebersicht/gefaerbte-informationen-ueber-fukushima-1.17639366>

In the four weeks after the accident, the number of articles in German newspapers was 577, in Swiss papers 521, in French papers 319 and in English papers 271.

The French and English journalists wrote intensively about the accident itself; the German and Swiss journalists translated the impact of the accident on their own countries, demanding an exit from nuclear energy. Ninety per cent of these articles discussed a potential exit and a moratorium for the civil exploitation of nuclear power. Fukushima was thus presented as an accident that had domestic consequences in Europe. As all countries are similarly remote from Japan and use similar safety standards, the difference in reporting cannot be explained by the nature of the event. The logical explanation for the differences in the weighting and nature of the Japanese disaster in the four countries is thus the historically dominating opinions and attitudes in journalism, according to the researchers. Most newspapers supported the opinion of the journalists with corresponding experts' opinion, for or against nuclear power; the only exception was the *Neue Zürcher Zeitung*. The two researchers highlight another fact: the Tohoku earthquake and the following tsunami claimed 30,000 casualties, the nuclear disaster killed three people and may cause another 100 to 1000 cancer deaths. But most journalists focused their articles on the nuclear accident.

When the study was published in *Die Welt*, a leading German weekly, the only reaction was a letter to the editors. In view of the political power of the nuclear exit in Germany, but also the relevance of the research, this is truly amazing. However, it does not astonish Kepplinger: most journalists shy away from reviewing their opinion on the nuclear exit or their role in reporting on the 11 March events in Japan.

The lack of reaction and the fact that the study was not picked up by other media could be because the researchers published the press release in summer and without the help of a press agency. This shows how news today is often ignored as information overload has caught up with journalists.

Hans Peter Würmli, Chairman of The Geneva Association's Chief Risk Officers' Network, pointed out the influence of insurance on disaster management: within the first hours of the accident, engineers at the plant apparently suggested the flooding of all reactors with sea water. Tokyo Power executives refused this option as it would have destroyed all reactors, with a loss of maybe US\$8bn investment. Insurers would have compared this loss with the potential US\$50bn loss or higher of a nuclear accident, and supported an early flooding.

In Germany and Switzerland, the discussion of the risks and costs of a nuclear exit are only starting.

### **Global governance—the dream of the third millennium to create certainty**

Hannah Arendt (1906-75), in her 1958 book *The Human Condition*, wrote that our century has totally transformed the human status: men are now members of a whole which is bigger than them and from which they cannot escape. Men live in a world where technology is increasingly important, and where politicians impose their view with no chance of escape; this world is also one of extreme violence and generalised barbarism. These thoughts were triggered by Sputnik, the first (Soviet) satellite, on its flight on 4 October 1957, which was considered a technological revolution that would change the world. Indeed, it led to the U.S.-USSR race to the moon and ended with the Apollo programme and the first American man on the moon.

Another world revolution was expected to result from the fall of the Berlin Wall in 1989, leading to the end of the world defined by two blocks (plus the Third World). The changes expected from this event led to two major publications, Huntington's famous 1992 lecture on *The Clash of Civilizations* and Yoshihiro Francis Fukuyama's 1992 book *The End of History and the Last Man*.

Fukuyama's book argued that the worldwide spread of liberal democracies and free market capitalism of the West and its lifestyle may signal the end point of humanity's sociocultural evolution and become the final form of human government.

Huntington's lecture (and later book of the same title) came to the conclusion that world politics was entering a new phase: mainly the end of history, the return of traditional rivalries between nation states, and the decline of the nation state from the conflicting pulls of tribalism and globalism. It is Huntington's hypothesis that the fundamental source of conflict in this new world will not be primarily ideological or primarily economic. The great divisions among humankind and the dominating source of conflict will be cultural. Nation states will remain the most powerful actors in world affairs, but the principal conflicts of

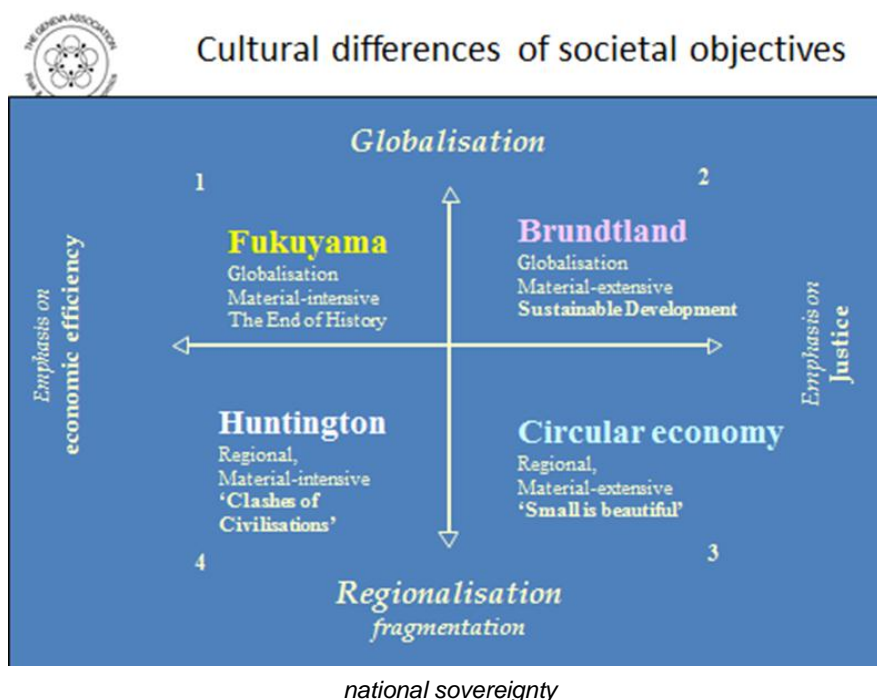
global politics will occur between nations and groups of different civilisations. The fault lines between civilisations will be the battles lines of the future.

Both these visions describe aspects of a possible future. Yet they need to be completed by two other visions: the UN vision of a sustainable development, best described in the 1987 report *Our Common Future*, also known as the Brundtland Report, from the UN World Commission on Environment and Development (WCED); and the concept of a circular economy, where small is beautiful.

The following diagram shows the cultural differences in the societal objectives of these visions:

- Brundtland and Fukuyama have globalisation as the main objective or outcome;
- Huntington and a circular economy have regionalisation as the main objective or outcome.

Fukuyama and Huntington, the children of the fall of the Berlin Wall, put the emphasis on economic efficiency; resource efficiency is not one of their objectives. Brundtland's emphasis is on justice, including an inclusive access to natural resources. A circular economy's emphasis is on an efficient use of all resources, including manpower—"Economics as if people mattered" was the title of the first chapter of E. F. Schumacher's 1973 book *Small is Beautiful: A Study of Economics as if People Mattered*.



The only approach that supports the UN's global governance is Brundtland's vision for the UNCED, with its emphasis on inclusive justice and globalisation. The position of UNEP FI (Principles of Responsible Investments (PRI), Principles of Sustainable Insurance (PSI)) and other UN organisations mentioned in the editorial are consistent with this philosophy; the figure can help to explain why these principles will not find general acceptance in, for instance, the U.S. or China.

The only approach which enables the development of a low-carbon, resource-efficient and labour-intensive economy is the circular economy; sustainable taxation would speed up this development.<sup>12</sup>

With regard to risk management, a circular economy reduces operational risks. By focusing on small and regional solutions, it avoids the risk created by the economy of scale of global production—which, in the past, has constantly ignored the diseconomy of risk that is the twin brother of economy of scale.

How will a circular economy, with its focus on stock instead of flow management, affect the insurance business? "As insurers and reinsurers are irrevocably linked to the economies in which they operate the global problems coming out of Europe has had an impact on them. What we're seeing globally is a slowdown in growth, a slowdown in premiums," said Kurt Karl.<sup>13</sup> He cited auto insurers—fewer vehicle

<sup>12</sup> [www.sustainbusper.com/sites/default/files/tp63\\_stahel\\_sustainable\\_taxation\\_10oct2011\\_4.pdf](http://www.sustainbusper.com/sites/default/files/tp63_stahel_sustainable_taxation_10oct2011_4.pdf).

<sup>13</sup> Kurt Karl, Swiss Re's chief economist, in Monte-Carlo.

sales mean fewer policies issued—and the construction industry, which has been unwinding since 2008, meaning fewer homeowner policies, as examples of how the slowdown affects the insurance industry. However, the number of cars on the road and of buildings standing has hardly changed. Could insurance redesign its business models to profitably managing existing policies instead of maximising income from new policies?

The economy is changing: micro-breweries, micro-bakeries and organic food are part of a regional economy, as well as plus-energy building, solar and geothermal energy and micro-hydro power plants. Decentralised power production-consumption patterns (first described by Toeffler as prosumer) will jeopardise the centralised business model of the utility companies, which is based on volume sales not efficient energy use. An opportunity for innovative insurance products for new types of businesses?

### **Does freezing the political development create peace?**

The Security Council of the UN is the only instrument that can decide military interventions. But as this is an oligopoly of the five winners of World War II, it lacks a global democratic base. And in fact, only the U.S. has the power to bring about such interventions. The UN Charter has made attack wars illegal, but it cannot prevent them (witness Falkland Islands / Malvinas). The International Court of Justice has the power to punish, but was only signed by 120 of 193 UN Member States. The Human Rights Convention was signed by all 193 members, but is ignored by most.

Which nation owns the islands in the East China—Sea Senkaku Islands for the Japanese, Diaoyu Islands for the Chinese—the small group of three islands, measuring 6.3 km<sup>2</sup>, claimed by Taiwan, the People's Republic of China and Japan?

The international community sides with Japan, because the islands were occupied by Japan before 1945 when the Charter of the UN, the first international act to prevent violence, was enacted.<sup>14</sup> After WW II, it was considered more important to freeze confrontations rather than establish justice. Winners were countries which had enlarged their territory in the 19<sup>th</sup> and 20<sup>th</sup> century, such as Japan and the U.S. (Texas, New Mexico and Southern California). Losers were countries like Mexico and China.

Countries bordering on the sea, profited from the 1945 Charter, and were further rewarded when the Law of the Sea (UNCLOS) became treaty in 1994.<sup>15</sup> UNCLOS states that these countries have an exclusive right to exploit economically a zone of 200 miles around their coast. The U.S. was one of the primary promoters of UNCLOS after large natural resources had been discovered near its shores. But the biggest beneficiaries of this law were clearly countries with many islands, such as Japan. Many (landlocked) countries objected to UNCLOS, but again, as in 1945, preference was given to a uniform solution of global governance.

With the thawing of the ice caps in the Arctic Ocean, UNCLOS has recently gained increased attention, with Russia being the big winner this time. It is estimated that up to 70 per cent of the mineral resources in the Arctic Ocean will be within its realm. Will this lead to a revision of UNCLOS?

### **People's Republic of China (PRC)**

At least four recent developments are of interest for Western insurers: the private property revolution of 1998; the 2010 tort law of the PRC, which has been discussed in the Guest Editorial by Richard Murray; the influence of social media and opportunities in the war for talents.

<sup>14</sup> Charter of the United Nations, Chapter 1, Article 2, paragraph 4: "All Members shall refrain in their international relations from the threat or use of force against the territorial integrity or political independence of any state, or in any other manner inconsistent with the Purposes of the United Nations."

<sup>15</sup> The United Nations Convention on the Law of the Sea (UNCLOS), also called the Law of the Sea Convention or the Law of the Sea treaty, is the international agreement that resulted from the third United Nations Conference on the Law of the Sea (UNCLOS III), which took place from 1973 through 1982. The Law of the Sea Convention defines the rights and responsibilities of nations in their use of the world's oceans, establishing guidelines for businesses, the environment, and the management of marine natural resources. The Convention, concluded in 1982, replaced four 1958 treaties. UNCLOS came into force in 1994, a year after Guyana became the 60<sup>th</sup> nation to sign the treaty. To date, 162 countries and the European Community have joined in the Convention. However, it is uncertain as to what extent the Convention codifies customary international law.

### **Private property and capitalism**

In the era before 1998, occupants of employer-provided housing paid minimal rent for their work-unit housing—which was issued based on seniority, family size and rank—and could essentially stay in it forever. There was no legal market for buying and selling property in China, even in rural areas without employer-provided housing, where families built their own homes.

Then, in 1998, the Chinese real estate market was born. It began with a decision by the Chinese State Council to monetise housing in an attempt to develop a commercial private market for real estate. In other words, instead of just providing apartments for lifetime occupancy, companies, non-profit organisations and government agencies began to give their employees the option of purchasing the house they lived in. This was the beginning of “capitalism”, and opened the market for rapidly growing private insurance opportunities.

Most visitors to China are astonished at the speed of development. But what is its origin? In the opinion of the editor of this newsletter, it is rooted in the Chinese economic development. “The West” has had 200 years of industrial revolution, followed by the computer/IT revolution, followed by the Internet revolution—in sequential order. China has had the same three revolutions in an integrated package within 50 years. This has created a speed and integrated thinking that is difficult to grasp by people in the West, but is present in Chinese society.

### **The new tort law of the PRC**

The tort law corresponds to the PRC administrative principles of keeping it simple (all the PRC is in one world time zone!). Today, mass tort in China is not accepted by courts, as the government wants to avoid mass movements. But is there a tipping point which could change the situation?

### **The social media, China style**

Microblogs (with a 40 per cent growth rate in the last 12 months) and other social media have a high status and application in China—much higher than in the West. The most popular website is [www.weibo.com](http://www.weibo.com); recent successful cases of reversing government decisions include the Shifang copper smelting plant. Microblogs are fast and uncontrollable, whereas Internet and iPhone apps are slow (due to controls) and often not accessible.

Social media and microblogs can be seen as human search engines, similar to crowd mapping (presented at our M.O.R.E. seminar 2011). They have installed a kind of direct democracy in China—but they can be based on wrong or misleading information. The Chinese social media and especially microblogs are specific to the PRC and difficult to follow for non-Chinese speakers. But they do increase enterprise risk in China and influence Chinese government regulation and policy.

Is there a cost to insurance? Social media may also have played a role in organising protests, such as thousands of demonstrators rallying across China following Tokyo's nationalisation of the East China Sea islands. Mr Yasuyoshi Karasawa, Chairman of the General Insurance Association of Japan, said that protest-related claims are estimated to reach ¥10bn (US\$126m). Leading non-life insurers such as Tokio Marine & Nichido Fire Insurance had been selling policies that cover damage from strikes, riots and civil commotion. However, they have stopped accepting new applications for such requests. As of late August 2012, there were over 14,000 Japanese firms operating in China.



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## Call for Papers and Speakers, Forthcoming Books

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### Call for Papers

#### 15th Joint Seminar of the European Association of Law and Economics and The Geneva Association

will be held in Girona on 13-14 June 2013 on the subject of:

#### ***Liability and Insurance in Times of Crisis***

The 15th Joint Seminar of the International Association for the Study of Insurance Economics (The Geneva Association) and the European Association of Law and Economics (EALE) will take place at the University of Girona, Facultat de Dret (Law School), Girona (Spain) on 13-14 June 2013.

The main topic of the seminar will be “**Liability and Insurance in Times of Crisis**”. Any papers dealing with the way in which the liability and insurance world has reacted or is able to react to various (financial, political, catastrophic) risks are welcome. Of course, the focus of the approach to liability and insurance of various crises should be economic analysis of law. Papers could *inter alia* deal with the following issues:

- Use of liability for newly emerging risks, including nano-technology, GMOs, carbon capture and storage under uncertainty.
- Role of liability and insurance in dealing with financial crisis, including liability of auditors, credit rating agencies, financial intermediaries and other stakeholders in the financial world.
- The comparative role of government and commercial (re)insurers in dealing with various crises, including the possibilities of public private partnerships between (re)insurers and government.
- Analysis of the need to adapt traditional liability and (re)insurance schemes to deal with various crises.

Abstracts should be submitted by **15 February 2013** for review by a scientific board. The acceptance of the proposals will be communicated by **15 March 2013**. **Full papers** are due by **15 May 2013**. A selection of the papers from the seminar will be invited for publication *in The Geneva Papers on Risk and Insurance - Issues and Practice*.

The seminar is jointly organised by Miquel Martín Casals (IECPL, University of Girona) and Michael Faure (Universities of Maastricht and Rotterdam).

#### *Contacts details:*

Miquel Martín-Casals, Professor of Civil Law, Institute of European and Comparative Private Law (IECPL), Universitat de Girona, Facultat de Dret, Campus de Montilivi, s/n, 17071 GIRONA (Spain), Tel. +34 972 41 81 39. (Secretary: Maria Olivas) E-mail: [secretaria.iecpl.dret@udg.edu](mailto:secretaria.iecpl.dret@udg.edu)

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### IRSPM 2013 Conference Panel 10

#### ***Risk prevention in the age of austerity: risk incubation as a function of public policy***

#### Chairs:

Professor Denis Fischbacher-Smith, University of Glasgow  
Dr Adina Dudau, University of Glasgow  
Dr Paul Barnes, Queensland University of Technology

## Aims

Public sector responses to the global crisis have taken many countries worldwide down the path of austerity, with serious consequences for their citizens, particularly the most vulnerable (the poor, the elderly, the children, the youth) who are normally dependent, to one degree or another, on welfare services provided or commissioned by the state. As governments struggle financially, they put vulnerable groups at risk, first by increasing taxes and, secondly, by cutting spending in key public service areas. The latter has significant implications, as it affects not only service provision by the public sector, but also by the private and the voluntary sectors.

This panel aims to tease out some consequences of austerity measures taken in both developed and developing countries in terms of risk management. The type of risk that is of interest here is not limited to service users; organisational and reputational risk are equally relevant to our theme. We therefore invite contributors to engage into a debate on issues including, but not limited to, the following:

- Conceptualising the “object” of risk, including people, organisations and symbols.
- Identifying the challenges and opportunities that the recent global financial crisis poses to governments and to government agencies.
- Examining case studies of risk incubation in the context of austerity.
- Examining the use of networks in either generating or dealing with risks.
- Exploring the links between the three sectors (public, private and voluntary) in risk generation and risk management.
- Exploring the links between politics and risk management.
- Identifying the risk managers—who can assess and control the incubation of risk in the public sector?

We expect contributions from a range of administrative cultures to allow for useful comparisons to be drawn. Both conceptual and empirical papers are welcome. We also aim to attract some practitioners (public sector professionals) to bring balance to academic perspectives on the theoretical issues raised in this panel. As the global economic crisis is currently under way, we feel that practitioners' views are particularly valuable here as they are nearest to the complex world of working with austerity.

Please submit your paper abstract no later than the **21 October 2013** by email to the corresponding panel chair, Dr Adina Dudau ([adina.dudau@glasgow.ac.uk](mailto:adina.dudau@glasgow.ac.uk)) copying in the conference organisers ([irspm2013@econ.muni.cz](mailto:irspm2013@econ.muni.cz)). The conference abstract guidelines suggest that proposals should include a description of the topic, the research questions and method, and the results to be reported. The recommended abstract length is of 900-1,200 words.

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## Call for Speakers and Pre-registration

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### The M.O.R.E. 27 Seminar

will be held in spring 2013 on the subject of:

#### ***Ground effects and other impacts of solar storms on terrestrial infrastructure and consequential losses***

Space weather refers to conditions on the Sun and in the space environment that can influence the performance and reliability of space-borne and ground-based technological systems, and can endanger human life or health.

We would like to hear from

- Experts involved with utility companies, power generators, power grid management, transmission network operators, manufacturers of such safety equipment as grid stability system, Geomagnetic Storm Induced Current (GIC) and Electromagnetic Pulse (EMP) Protection.
- Researchers having studied the impacts of solar storms and consequential losses.



- Risk managers with loss experience in this field.

A more detailed programme, together with a date and venue, will become available in early 2013. Experts interested in giving a presentation or participating in the M.O.R.E. 27 seminar are invited to contact Walter R. Stahel, at [walter\\_stahel@genevaassociation.org](mailto:walter_stahel@genevaassociation.org).

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## **Forthcoming Publications**

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### **Ocean Warming Report** ***Warming of the Oceans and Implications*** ***for the (Re)Insurance Industry***

This report is written under the guidance of the CR+I WG, with Falk Niehorster as editor.

The global oceans and their currents are of fundamental importance for the storage and distribution of the solar energy absorbed by the climate system. By transporting vast amounts of energy and being the main source of water in the atmosphere, oceans determine weather patterns and provide the ingredients for the development of extreme events. To understand the complex interaction between oceans and the atmosphere is the key to understanding the distribution, frequency and intensity of various extreme events.

Recently, improved observational records provide new evidence of warming of the oceans and the distribution of energy within them. A warming trend is detectable and has already changed selected but relevant metrics for extreme events away from what we have observed over the past century. As climate change progresses, this warming trend will continue to impact the metrics.

- 1) Evidence for ocean warming since mid of the 20<sup>th</sup> century
- 2) The impact of ocean warming on extreme events
  - Sea level rise
  - Modes of variation—El Niño Southern Oscillation (ENSO) and The North Atlantic Oscillation (NAO)
  - Tropical cyclones – the strongest get stronger
  - Extra-tropical winter storms
  - Monsoon
  - Hydrological events—wet gets wetter
  - Coral bleaching
  - Complex interactions
  - Links to geophysical risks
- 3) Impact of ocean warming on the global insurance industry
- 4) Insurability/Asset Management
- 5) Public Policy

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### **Liability Report 2013**

A forthcoming publication, to be published in spring 2013, will study a number of liability issues including the implications for insurers of the Dodd Frank Act in the U.S., the Foreign Bribery legislation in the U.K., the Collective Action movement in the EU, and the class action legislation being adopted in developing economies. Another topic will be the rapid rise of litigation funding by third-party investment groups and investment companies.

The publication will be a volume of chapters authored by members of the CR+I Liability Sub-Committee and edited by Richard H. Murray, its Chairman.

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## Future Risk Management Conferences

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The annual M.O.R.E. Seminars (Management of Risks in the Economy) have been an integral part of The Geneva Association's Risk Management Programme for the last 25 years.

The CR+I Seminars (Climate Risk and Insurance) started in 2009 and have been held annually on topics related to the impacts of climate risks and extreme events. The CR+I seminars have the objective of fostering interactions between the private sector and policymakers on Mitigation and Adaptation for Extreme Events and Climate Risk.

These seminars are a key tool in the dialogue with economic actors, academics and policymakers in order to emphasise the role of insurance in a modern service economy. They are open to a maximum of 50 participants in order to foster an exchange of views on a first-come first-served basis. Presentations are limited to 20 minutes, followed immediately by 20 minutes discussion for the same reason. Participation is free, participants have to pay their own travel and accommodation costs.

The language of the seminars is English. All presentations will become available to participants on the password-protected part of The Geneva Association website [www.genevaassociation.org](http://www.genevaassociation.org), and will also be published in the Etudes & Dossiers series.

Experts interested in participating can find relevant information on upcoming seminars on the website of The Geneva Association [www.genevaassociation.org](http://www.genevaassociation.org).

Experts interested in giving a presentation or participating in the M.O.R.E. or CR+I seminars are invited to contact Walter R. Stahel, at [walter\\_stahel@genevaassociation.org](mailto:walter_stahel@genevaassociation.org) as soon as possible. The draft programme of the 2013 seminars is as follows:

### The M.O.R.E. 27 Seminar

will be held in spring 2013 on the subject of:

#### ***Ground effects and other impacts of solar storms on terrestrial infrastructure and consequential losses***

Space weather refers to conditions on the Sun and in the space environment that can influence the performance and reliability of space-borne and ground-based technological systems, and can endanger human life or health. A call for speakers can be found on p. 17.

A more detailed programme, together with a date and venue, will become available in early 2013. Experts interested in giving a presentation or participating in the M.O.R.E. 27 seminar are invited to contact Walter R. Stahel, at [walter\\_stahel@genevaassociation.org](mailto:walter_stahel@genevaassociation.org).

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### The 4<sup>th</sup> CR+ I Seminar on

#### ***Adapting to Extreme Events and Climate Risk***

16 November 2012, Zurich Development Centre, Zurich

The Geneva Association's Risk Management Programme organises this Seminar jointly with the Zurich Insurance Group in Zurich.

Each topic will be launched by a kick-off presentation of five minutes, followed by a general discussion

8.30

#### **Welcome and Introduction**

Walter R. Stahel, Vice Secretary General and Head of the Risk Management Research Programme, The Geneva Association

#### **Workshop 1 The CR+I Working Group (WG) research topics of the coming years**

Chair: Michael Butt, Chairman Axis Re, co-chair of the CR+I Project

- 8.40 The topics
- 1 **Increasing losses from Convective Events.** Kick off by Peter Höppe, Munich Re
  - 2 **How do we get chief underwriters close to the science, or inviting management input to get the CR+I science into Chief underwriters' work? Shifting from historic to predictive.** Kick off tba
  - 3 **Consequences of a 4°C warming for insurance?** Adaptation measures? Kick off tba
  - 4 **Consequences of peak water/water shortages for insurance?** Adaptation measures? Kick off tba
  - 5 **Report from the Oxford meeting on 12-14 September** (*Falk Niehorster and Lindene Patton*)
- 10.30 **CR+I adaption services—a new market?** Engineering services by insurance as a service, for industry (e.g. to identify risk synergies) and governments (e.g. to operate and maintain levies). Kick off by Swenja Surminski
- Workshop 2 the CR+I Liability Sub-Committee (LSC) research topics of the coming years**
- 13.30 Introduction  
Lindene Patton, Zurich Insurance Group, vice-chair of the Liability Sub-Committee (LSC)
- **Opportunities for and risks of liability cover** in e.g. China
  - **Potential liabilities from e.g. ESG, PSI and other quasi-regulatory sources**
  - **Preliminary conclusions from the Liability Report 2012**
  - Other topics
- 15.00 **Climate and energy futures**, David Bresch, Swiss Re
- 16.00 End of the seminar

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## Other Seminars organised by The Geneva Association

### Invitation to register

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### The Four Pillars: The Next 25 Years,

3-4 December, 2012, Geneva  
Hôtel Intercontinental, Geneva, Chemin du Petit-Saconnex 7-9, Switzerland  
Room Paris-Méditerranée

Participation is free, participants have to register in advance and pay their own travel and accommodation costs.

- Day 1: Monday 3 December 2012**
- 08:30-08:35 Welcome and Opening Remarks  
**John Fitzpatrick**, Secretary General, The Geneva Association
- 08:35-10:00 **The Four Pillars, 1987-2012 and the next 25 years**  
Chairman: **Krzysztof Ostaszewski**, Research Director, The Geneva Association  
**Orio Giarini**, Trustee, World Academy of Art and Science, and former Secretary General, The Geneva Association, *Topic*: History of the Four Pillars Programme  
**Edward Whitehouse**, Principal Economist, Organisation for Economic Co-operation and Development, *Topic*: Vision of the next 25 years
- 10:30-11:30 Keynote Address  
**Elsa Fornero**, Minister of Labor, Social Policies and Equal Opportunities of Italy  
*Topic*: Adequacy and Sustainability of Pension Systems, is there a Tradeoff?
- 11:30-13:00 **Session on the First Pillar**

Chairman: **Krzysztof Hagemeyer**, Chief, Policy Development and Research, Social Security Department, International Labour Organization, *Topic*: Sustainability and Adequacy of Social Security in the Next Quarter Century

**Chris Daykin**, International Actuarial Association, also Chairman, Social Security Subcommittee, Groupe Consultatif Actuariel Europeen, *Topic*: Can First Pillar Pensions be Made More Sustainable?

**S. Erik Oppers**, Deputy Division Chief, Global Financial Stability Division, International Monetary Fund, *Topic*: The Financial Impact of Longevity Risk and Potential Costs for Governments

**Michael Wolgast**, Chief Economist and Head of Economics Department, German Insurance Association, *Topic*: The German Pension Reform After one Decade—Implications for the Global Discussion on Pension Reform

14:15-15:45 **Session on the Second Pillar**

Chairman: **Anthony Webb**, Research Economist, Center for Retirement Research, Boston College, *Topic*: Using Participant Data to Improve Defined Contribution Default Portfolio Allocations

**Torben Thomsen**, Chief Pricing Officer, Life & Health, Swiss Re, *Topic*: Managing Longevity Risk in Private Pension Systems

**Amy Kessler**, Senior Vice President, Head of Longevity Reinsurance, Prudential Financial Inc., *Topic*: Insurance Solutions for Pensions Challenges

**Klaus Miller**, Member of the Executive Board, Life and Health Reinsurance, Hanover Re  
*Topic*: Enhanced Annuities for Private Pensions Beneficiaries

16:15-17:15 Keynote Address

**Bruno Pfister**, CEO, Swiss Life, *Topic*: Challenges for and Levers to Ensuring Sustainability of the 2nd pillar

17:30

**Cocktail Reception**

Day 2:

**Tuesday 4 December 2012**

08:30-10:00 **Session on Third Pillar**

Chairman: **Krzysztof Ostaszewski**, Research Director, The Geneva Association  
*Topic*: The Role of Price Signals from the Insurance Industry for the Four Pillars

**Kurt Karl**, Chief Economist, Swiss Re, *Topic*: Insurance Industry—Anchor of Stability for Global Retirement Systems

**Lorenzo Savorelli**, Head of Research Department, Generali Group  
*Topic*: to be determined

**Volker Deville**, Executive Vice President, Allianz SE  
*Topic*: Global Demographics and its Impact on the Third Pillar

10:30-12:00 **Session on Fourth Pillar**

Chairman: **Walter R. Stahel**, Vice Secretary General, The Geneva Association  
*Topic*: Circular Economy as a Key to Sustainability of Retirement Systems and the Role of the Fourth Pillar

**Chris Ball**, Chief Executive, The Age & Employment Network  
*Topic*: Effective Employment Policies for the Silver Workers and the Role the Insurance Industry Can Play

**Xenia Scheil-Adlung**, Health Policy Coordinator, Social Security Department, International Labour Organization, *Topic*: Health Challenges of Silver workers—Observations on Sick Leave of the Employed Elderly and Gaps in Financial Protection of Health Expenditure

12:00-13:00 Keynote

**Andrew Rear**, Chief Executive, Africa, Asia-Pacific, UK and Ireland Life, Munich Re,  
*Topic: Aiming for a Soft Landing: Can the Next Generation Afford to Pay for the Last One*

14:30-16:00

**Session on Longevity**

Chairman: **John Fitzpatrick**, Secretary General, The Geneva Association  
**Daria Kachakhidze**, Head of Research & Development, Centre on Longevity and Mortality Insurance, SCOR, *Topic: World Life Expectancy and Future Longevity Scenarios*

**Johannes Lörper**, Member of the Executive Board, ERGO; Chairman of the German Actuarial Society, *Topic: to be determined*

**Paul L.C. Hilbers**, Division Director, Division Director of De Nederlandsche Bank, and a Member of the Joint Forum Working Group on Risk Assessment and Capital  
*Topic: The Unique Nature of Longevity Risk*

**Makoto Okubo**, General Manager International Affairs, Nippon Life Insurance  
*Topic: Demographic Challenges and Opportunities for Japanese Life Insurers*

Should you wish to register, or have further questions, please contact Ms Barbara Botterill, at The Geneva Association, [Barbara\\_Botterill@genevaassociation.org](mailto:Barbara_Botterill@genevaassociation.org). We will confirm individual registrations after the registration deadline.

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## Forthcoming Publication on Climate Change and Insurance

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Review of the forthcoming publication ***Climate Change and Insurance***  
 by Christina M. Carroll, J. Randolph Evans, Lindene Patton and Joanne L. Zimolzak.  
 ABA Publishing, November 2012

This book is set to become a standard reference book on climate change litigation, written by four practitioners, three of whom are leading legal counsels in a major U.S. law firm and the fourth is Chief Climate Officer of a major insurance company. Throughout the book, the reader profits from the inside knowledge of lawyers who have been involved in real cases and have lived the transformation of the climate change topic from a discussion between scientific experts arguing about probabilities of future events, to a fight between lawyers in courts, involving big and real financial compensation.

Given the increasing number of extreme events and growing discourse on climate change, there has been a recent surge of publications that address characteristics of extreme events and their impact on insurance,<sup>16</sup> climate litigation in general,<sup>17</sup> and the increasing exposure to climate liability that insurers face.<sup>18</sup> Many have analysed the outcomes of particular climate cases.<sup>19</sup> Most discuss the consequences of property damage or D&O coverage<sup>20</sup> on insurance, and propose proactive solutions to protect insurers from product exposure.<sup>21</sup> There is consensus that the losses for insurers from climate change could be commensurate to those from asbestos or tobacco, particularly given that most current and historic occurrence policies were underwritten without considering the impacts of climate change and could leave the insurer exposed.

<sup>16</sup> Courbage and Stahel (2012).

<sup>17</sup> See Pidot (2006). SustainAbility (2004), explores the changing landscape of liability in relation to multiple subjects. It operates under the assumptions that legal liability is changing, business is vulnerable to new forms of legal activism and society's values are quickly shifting.

<sup>18</sup> See Mills (2009).

<sup>19</sup> See Gerrard (2011), Shapiro (2011), Murray (2011).

<sup>20</sup> See Kunreuther and Michel-Kerjan (2007), and Liberty Mutual (2010).

<sup>21</sup> See Mills (2009).

*Climate Change and Insurance* substantially expands on these themes and works. The book focuses on the U.S., outlines the five stages that in the past have typically led to mega-torts—such as asbestos and tobacco—and demonstrates how stakeholders are beginning to pursue this course, despite obstacles, by applying similar strategies to climate change litigation. Three conditions facilitate this process:

- 1) A lack of Congressional policy-setting and regulation for green-house gases (GHGs) causes stakeholders to pursue legal remedies.
- 2) Activist lawyers have financial incentives to pursue and continue pursuing climate litigation.
- 3) The international scientific community has determined that a specific cocktail of GHGs, emitted to varying degrees by humans, but also existing naturally, cause climate change. Debates currently centre around whether GHG emitters can be held accountable for their emissions and, to what extent, in court.

The book is an engrossing and comprehensive investigation into climate change litigation, policy and regulation (or lack thereof); and their intersection with insurance. What distinguishes it from other works on similar topics is that it investigates and analyses all major climate change cases in the U.S. as a cohesive body of litigation, rather than treating cases individually. This approach allows the authors to effectively analyse the dynamics of the legal processes, tracing their trajectory to gauge the consequences for insurers, overall and by each product line, and meticulously propose a number of ways to limit exposure. Whether stakeholders succeed in achieving mega-tort recoveries remains to be seen but, in any case, insurers risk spending substantial sums on their legal defence and should seriously consider mitigating climate change exposure.

*Climate Change and Insurance* delves into the issues surrounding both current and emerging legal aspects. International litigation issues normally start in the U.S., as its legal system is more open to testing mass tort cases. But in a global world, issues such as climate change litigation quickly spread to other continents; this book is a wakeup call for any Japanese or European company interested in the development of the topic of climate change and insurance, or emitting large volumes of GHG emissions.

This book can also help underwriters to start the transition from pricing climate change risks based on historic data to risk-based premiums calculated on foreseeable scientific and legal developments. It covers implications for commercial general liability (CGL), directors and officers (D&O) and environmental liability, professional liability and renewable energy-related policies.

One function of The Geneva Association is to scan the horizon for future risks and opportunities that the insurance industry will have to face in the near future. One such challenge is how to get Chief Underwriters close to the science, or inviting management input to get the CR+I science into Chief Underwriters' work, shifting from historic to predictive underwriting. The book *Climate Change and Insurance* is aptly named, as it provides extremely useful guidance on the subject of its title.

An extensive glossary and acronyms of terms helps non-experts read this book, which can be pre-ordered by email from [orders@americanbar.org](mailto:orders@americanbar.org).

Review by Meghan Orié/Walter R. Stahel

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## Miscellaneous Information and Prevention News

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### OECD to launch global product recall portal

The OECD has hosted a news conference to launch its new global portal on product recalls during the *International Product Safety Week 2012* on Friday 19 October 2012.

The online portal will give consumers, businesses and governments quick and easy access to the latest information on products recalled from markets in Australia, Canada, Europe and the United States. It is designed to promote and improve product safety. Deaths and injuries worldwide from unsafe products are estimated to cost more than US\$1tn each year.

### WHO decides fine particles cause cancer

The decision by the World Health Organization (WHO) that fine particles from diesel engines cause cancer and could double the number of cancer deaths in the next decades might herald the next class action suits. A 1995 decision by the Supreme Court of India, which analysed its impact on health, led to the ban of diesel engines, a mandatory conversion from diesel engine to Compressed Natural Gas (CNG) for trucks and buses. This decision has so far been ignored by Western governments ([www.product-life.org/en/archive/cng-delhi](http://www.product-life.org/en/archive/cng-delhi)).

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## The CR+I Project of The Geneva Association: Climate Risk and Insurance

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### The CR+I Project of The Geneva Association Work Programme 2012-2014

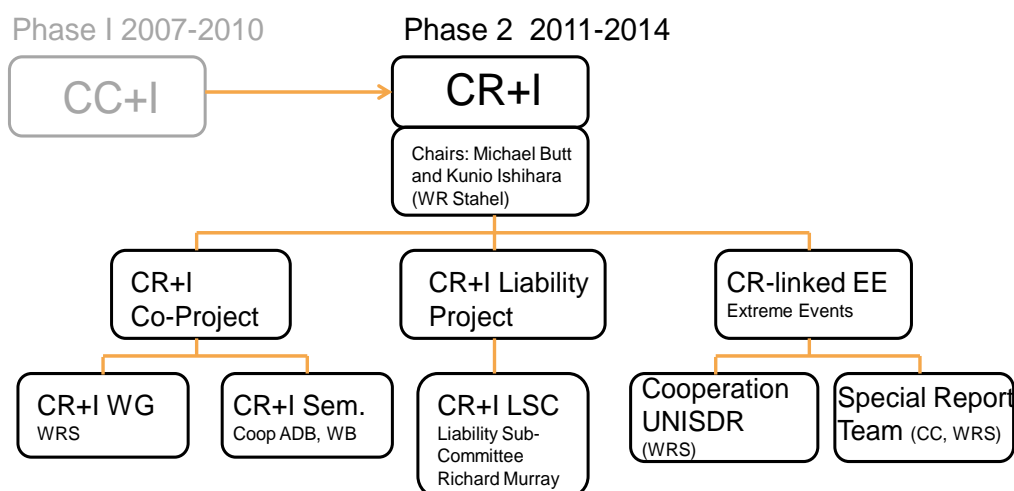
The theme of the CR+I (Climate Risk and Insurance) Project is "Sustainability by increasing resilience to climate risk and related extreme events".

The focus of this project will be to find ways for insurance to adapt to and manage climate risk and extreme events. The CR+I project uses a proactive approach.

The new CR+I Working Group (CR+I WG) has been the main tool to develop the CR+I Project, chaired by Michael Butt and Kunio Ishihara and managed by Walter R. Stahel. It held its first workshop on 14 November 2011 in London, the second on 19 April 2012 in Munich. The third CR+I WG workshop will be held 15 November 2012 in Zurich. The Working Group has about 25 members.



## CR+I Project Structure



The annual CR+I Seminars are developed in cooperation with changing partners, with a focus on developing countries. The 3<sup>rd</sup> CR+I Seminar was held in Singapore in October 2011, the 4<sup>th</sup> CR+I Seminar will be held 16 November 2012 in Zurich, to define the strategy of the next years.

The CR+I Liability Project has been developed by the CR+I Liability Sub-Committee, chaired by Rick Murray, seconded by Lindene Patton (Zurich Insurance Group). A first report on Liability Dynamics is scheduled for spring 2013.

The CR-linked Extreme Event Project has developed a cooperation with the UN International Strategy for Disaster Reduction (UNISDR) in 2012, resulting in the organisation of the M.O.R.E. 26 Seminar, held in London on 29 May 2012. It evaluated UNISDR's world risk model through a group of leading modelling experts under the direction of Dr Robert Muir Wood, chief scientist of RMS London and member of the CR+I WG of The Geneva Association.

A second activity of the Project is the writing and publication of special reports on extreme events.

The first Special Report—*Extreme events and insurance: 2011 annus horribilis*—was published on 11 March 2012 as Geneva Report N° 5. It was edited by Christophe Courbage and Walter R. Stahel from The Geneva Association, with contributions by several members of the CR+I Working Group (WG) of The Geneva Association.

A second Special Report—on insurance case studies of governmental risk management successes and shortcomings—should be ready in early 2013. The report's objectives are (1) to collect a description of short case studies that describe situations in which regulatory regimes, public policy, government action or inaction led to problems in risk coverage and/or insurance market failures (or successes) to the detriment of citizens (or communities), and (2) to draw lessons from the failure/success and formulate possible solutions for governments to avoid such problems in the future. The research is done by Meghan Orie, researcher of The Geneva Association, outside researchers, UNISDR staff and Walter R. Stahel. The report will probably be an edited volume published jointly by UNISDR and The Geneva Association.

Also, The Geneva Association is pleased to announce, in coordination with the World Bank/Global Facility for Disaster Reduction & Recovery (GFDRR) Disaster Risk Financing & Insurance Program, a special issue on "Disaster Reduction and Extreme Events" in *The Geneva Papers on Risk and Insurance—Issues and Practice* (July 2013).



A third Special Report, on “Ocean warming”, is being written by a group of members of the CR+I WG and should be ready for publication in early 2013. The lead author and editor is Dr Falk Niehorster, Science Program Manager of the Risk Prediction Initiative (RPI) at the Bermuda Institute of Ocean Science, St George’s, Bermuda and member of the CR+I WG of The Geneva Association.

The CR+I Project continues to build on the work of the CC+I Project which had a more scientific focus. Its activities culminated in:

- the Kyoto Statement;<sup>22</sup>
- the publication of *The Geneva Report N° 2: The insurance industry and climate change—Contribution to the global debate*;<sup>23</sup>
- the joint statement of The Geneva Association, UNEP-FI, MCII and ClimateWise: “Global insurance industry statement on adapting to climate change in developing countries”;<sup>24</sup> and
- the series of seminars, workshops and conferences which The Geneva Association has been organising for many years.

The CR+I Project has a much broader and applied focus than the CC+I Project. The focus will be on climate risk, including adapting to and managing extreme events. Its main emphasis will be on how to increase the resilience to extreme events; we therefore have to be sensitive to regional differences.

Developing closer contacts with authorities in charge of disaster reduction, such as civil protection and emergency management offices and national CROs—where they exist—will help, as these structures reflect the regional differences in risk perception and management. In addition, contacts on the international level will continue.

The CR+I Project incorporates a Liability Sub-Committee, which focuses on climate change liability. This topic has attracted a rapid growth and diversification, lately through “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 Sub-Committee of the CR+I Project of The Geneva Association.

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## The ART of CROs Networks

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“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 the Chief Risk Officer or CRO. The Geneva Association, jointly with its Members, decided to hold annual events to promote the understanding of the role of the CRO. The ART of CROs Network activities have been managed from the beginning until 30 June 2010 by Dr Bruno Porro. The new chairman, from 1 July, is Dr Hans Peter Würmli.

The **ART of CROs meetings** consist of Annual Round Tables of Chief Risk Officers. These are open to the CROs of member companies of The Geneva Association. Their objective is to enable discussions of topics that CROs are confronted with in their activities.

The **CRO Assemblies** are open to a wider audience of CROs from insurance, banking and industry, as well as from insurance associations. The objective is to disseminate the knowledge gained and issues identified by the CRO Forum and the ART of CROs workshops. The activities of the ART of CROs networks are discussed at the annual CRO Assemblies and documented on the websites [www.cronetworks.org](http://www.cronetworks.org) and [www.genevaassociation.org](http://www.genevaassociation.org).

<sup>22</sup> See [www.genevaassociation.org/Portals/0/Kyoto\\_Statement\\_signed\\_14July09.pdf](http://www.genevaassociation.org/Portals/0/Kyoto_Statement_signed_14July09.pdf).

<sup>23</sup> *The insurance industry and climate change—Contribution to the global debate*, at [www.genevaassociation.org/PDF/Geneva\\_Reports/Geneva\\_report\[2\].pdf](http://www.genevaassociation.org/PDF/Geneva_Reports/Geneva_report[2].pdf).

<sup>24</sup> See [www.genevaassociation.org/PDF/General\\_Information/Developing\\_World\\_Statement.pdf](http://www.genevaassociation.org/PDF/General_Information/Developing_World_Statement.pdf).

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. Publications are available on <http://www.thecroforum.org/publications/>

## The ART of CROs Meetings<sup>25</sup>

In 2002, The Geneva Association decided to create, 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 activities with the risk specialists of the Members' companies, and to identify and prioritise themes and issues of interest to The Geneva Association's Members. The meetings normally start with a dinner and can extend over one or two days.

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. Participation is free of charge, but CROs interested in attending should register in advance. Participants have to pay their own travel costs and hotel accommodation.

The **8<sup>th</sup> ART of CROs** was held in Portugal, on **29-30 April 2010**, organised jointly by The Geneva Association and Companhia de Seguros Tranquilidade SA, Lisbon.

The **9<sup>th</sup> ART of CROs** was held in Basel, Switzerland, on **12-13 May 2011**, hosted by the Bâloise Insurance Company. Presentations have been published as *Etudes & Dossiers* no. 376, August 2011.

The **10<sup>th</sup> ART of CROs** was held in The Hague, on **12-13 April 2012**, hosted by AEGON. Presentations can be accessed on The Geneva Association's website at [www.genevaassociation.org](http://www.genevaassociation.org), using a code and password. Published as *Etudes & Dossiers* no. 389 May 2012.

The **11<sup>th</sup> ART of CROs** will take place in Hannover, on **12-13 June 2013**, hosted by Hannover Re.

## The Annual CRO Assemblies<sup>26</sup>

These events are open to a larger audience of Chief Risk Officers 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 association 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 CRO 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

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<sup>25</sup> Chief Risk Officers interested in participating to the ART of CROs Meetings and the Annual CRO Assemblies are invited to directly contact the facilitator of this programme, Walter R. Stahel, for more information at [walter\\_stahel@genevaassociation.org](mailto:walter_stahel@genevaassociation.org).

<sup>26</sup> Chief Risk Officers interested in participating to the ART of CROs Meetings and the Annual CRO Assemblies are invited to directly contact the facilitator of this programme, Walter R. Stahel, for more information at [walter\\_stahel@genevaassociation.org](mailto:walter_stahel@genevaassociation.org).

conducive to interaction and dialogue. Input on topics to be addressed and contributions from participants are welcome

The **5<sup>th</sup> CRO Assembly** was held on **11 and 12 November 2009** at the Swiss Re Centre for Global Dialogue in Rueschlikon, Zurich, and was organised jointly by The Geneva Association, Swiss Re and the CRO Forum. The 5<sup>th</sup> Chief Risk Officer Assembly took place at a time dominated by the consequences of the global financial and economic crisis. The theme was “Navigating the storm—risk management during an economic crisis”.

The **6<sup>th</sup> CRO Assembly** was held on **24 and 25 November 2010** at Munich Re in Munich, and 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 **7<sup>th</sup> CRO Assembly** was organised jointly by The Geneva Association, Swiss Re and the CRO Forum on **16 and 17 November 2011**, at held at the Swiss Re Centre for Global Dialogue in Rueschlikon, Zurich. The theme was “The path to future growth—Focusing on new risk horizons”.

The **8<sup>th</sup> CRO Assembly** will be held on **28 and 29 November 2012** at Munich Re in Munich, organised jointly by The Geneva Association, Munich Re and the CRO Forum. The theme will be a quote by Winston Churchill “*Let our advance worrying become advance thinking and planning*”. CROs interested in attending should contact Ms Susanne Schneider, Executive Assistant, Integrated Risk Management, Munich Re: fax: +49 (89) 3891-74905, or Walter Stahel at [walter\\_stahel@genevaassociation.org](mailto:walter_stahel@genevaassociation.org).

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## The Activities of the CRO Forum

Participation at the quarterly CRO Forum meetings is limited to its members.

**The Position Papers of 19 CROs of the world’s leading insurance and reinsurance companies:**

- **on Global Climate Change** can be downloaded from [cronetworks.org/Cro%20Events/CRObriefing.pdf](http://cronetworks.org/Cro%20Events/CRObriefing.pdf);
- **on Influenza Pandemics: a prominent example for a mortality shock event**, can be downloaded from <http://www.thecroforum.org/position-paper-influenza-pandemics-position-paper/>
- **on solar storms**.

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## Books, Publications, Articles and Papers Received

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### ***The Changing Profile of Corporate Climate Change Risk***

Dr Mark Trexler and Laura Kosloff

“Trexler and Kosloff have written an essential text for every business and investor struggling to understand the strategic and financial implications of climate change. While climate policy may remain uncertain, climate change and its consequences are all too real. Trexler and Kosloff provide practical suggestions for coming to grips with this new reality which institutions like ours have only just begun.” (Alan Miller, Principal Climate Change Specialist, International Finance Corporation.)

*About the book:*

Many companies internalise the current stalemate over global climate policy into a perception that climate risk is no longer a critical issue. Business climate risks, however, include:

- operational and supply chain (physical) risk;
- brand risk;
- market-driven structural risk; and
- liability risk.

This short, expert e-book will help business executives to:

- rethink their perceptions of climate risk;
- evaluate whether their company is effectively positioned; and
- make informed and prudent business decisions about climate change risk in an environment rife with policy uncertainty.

This short, expert book on climate change risk is now available in pdf and a variety of e-book formats. The text has been used as course material for a leading executive education course on climate change risk. Course leaders can request inspection copies by reply.

More info on:

[www.dosustainability.com/shop/the-changing-profile-of-corporate-climate-change-risk-p-2.html](http://www.dosustainability.com/shop/the-changing-profile-of-corporate-climate-change-risk-p-2.html)

*People and the planet*, the Royal Society Science Policy Centre Report 01/12, London. Issued April 2012. DES2470. Available at <http://royalsociety.org/policy/projects/people-planet/report/>

Bacchetta, M, and Jansen, M., *Making Globalization Socially Sustainable*, Geneva: WTO and ILO, WTO ISBN 978-92-870-3783-1 and ILO ISBN 978-92-2-124583-4. Available at [http://www.wto.org/english/res\\_e/booksp\\_e/glob\\_soc\\_sus\\_e.pdf](http://www.wto.org/english/res_e/booksp_e/glob_soc_sus_e.pdf)

Ellen MacArthur Foundation (2012) *Towards the Circular Economy*. McKinsey provided the overall project management, developed the fact base and delivered the analytics. The report draws from the input and expertise of a wide range of academic and business leaders. [thecirculareconomy.org/fetches/new?download\\_id=4f26c6959d31c63107000018](http://thecirculareconomy.org/fetches/new?download_id=4f26c6959d31c63107000018).

#### **The Risk Management Newsletter**

This newsletter is published biannually by The Geneva Association and is available on our website at [www.genevaassociation.org](http://www.genevaassociation.org). Subscription is free for all interested parties.

Editor's e-mail: [walter\\_stahel@genevaassociation.org](mailto:walter_stahel@genevaassociation.org).

The Risk Management Newsletter is an integral part of The Geneva Association's dialogue with other economic actors in order to emphasise the role of insurance in a modern service economy. Other research programmes deal with Insurance and Finance, PROGRES (research programme on Regulation, Supervision and Legal Issues), Insurance Economics, World Fire Statistics, The Four Pillars (research on social security, insurance and retirement), Health and Ageing (research on health and productive ageing) and the general programme on the activities, news, and subjects of special interest concerning The Geneva Association.

## **Summary of the Risk Management Programme of The Geneva Association**

[www.genevaassociation.org/Research\\_Programme/Risk\\_Management.aspx](http://www.genevaassociation.org/Research_Programme/Risk_Management.aspx)

### **M.O.R.E.—Management of Risks in the Economy**

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.Seminars** of the last years

- 20 **The Role of Risk Management and Insurance in the Leisure Industry** organised jointly with MAPFRE Foundation, was held on 16-17 November 2006 at MAPFRE Foundation, Madrid, Spain. Papers were published in *Etudes & Dossiers* No 322, November 2006.

- 21 **The Role of Risk Management and Loss Prevention in Fire Insurance**, organised jointly with SCOR, was held on 24-25 November 2007 in Paris and integrated **the 25<sup>th</sup> Anniversary of the World Fire Statistics Centre (WFSC)**. Papers were published in *Etudes & Dossiers* No 333, October 2007.
- 22 **The Total Cost of Risk–The Risk Cost Iceberg**, organised jointly with Munich Re, held in Munich, September 2008. Papers were published in *Etudes & Dossiers* No 346, October 2008.
- 23 **Insurance Industry and climate change—a contribution to the global debate**, with a special focus on South America, was organised in Bogotá, jointly with Suramericana de Seguros SA, 19-20 October 2009. Papers were published in *Etudes & Dossiers* No 356, January 2010.
- 24 **Modelling and Mapping Risks**, has been held 23-24 June 2010 at Bermuda, hosted by Axis Re. Papers were published in *Etudes & Dossiers* No 364, October 2010.
- 25 **Modelling and Mapping Risks and Opportunities**, was held 12-13 July 2011 at Bermuda, hosted by Axis Re. Papers were published in *Etudes & Dossiers* No 379, September 2011.
- 26 **Evaluating UNISDR’s world risk model** was held 29 May 2012 in London, hosted by RMS.
- 27 **Ground effects and other impacts of solar storms on terrestrial infrastructure and consequential losses**. Spring 2013, see p. 18 for a call for more information.

#### THE M.O.R.E. STUDIES of recent years

“INTEREST–Insurance, Technological Risks and Emerging Science and Technology Policies–Final Report to the European Commission”. *Etudes & Dossiers* No 267, March 2003

“Vulnerabilities and Criticalities of Technical and Organisational Systems in the New Service Economy”, by Andrew Koubatis and Jorge Yerena Schönberger, published in *Etudes & Dossiers* No 280, Special Report, March 2004.

## The Climate Risk and Insurance (CR+I) Project

The Climate Risk and Insurance (CR+I) Project, (formerly Climate Change and Insurance) is the second pillar of the Risk Management research programme of The Geneva Association. It consists of:

- **the CR+I working group, of experts from the CR+I field;**
- **the CR+I reports; and,**
- **the CR+I seminars.**

The 1<sup>st</sup> CR+I–Seminar, organised jointly with Suramericana de Seguros, was held in Bogotá, 19-20 October 2009.

The 2nd CR+I–Seminar, organised jointly with Allianz do Brasil, was held in São Paulo, 27-28 September 2010.

The 3<sup>rd</sup> CR+I (Climate Risk and Insurance) Seminar took place 18 October 2011 in Singapore, hosted by NTU Singapore.

The 4<sup>th</sup> CR+I Seminar will take place 14 November 2012 in Zurich.

## The Research Programme on Risk Management

The Risk Management Programme is an integral part of The Geneva Association's dialogue with economic and academic actors in order to emphasise the role of insurance in a modern service economy.

The focus of the Risk Management Programme is:

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

## The Geneva Association

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

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

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

Established in 1973, The Geneva Association, officially the "International Association for the Study of Insurance Economics", is based in Geneva, Switzerland and is a non-profit organisation funded by its members.

*Secretary General and Managing Director:* John H. Fitzpatrick; *Vice Secretaries General:* Jan Monkiewicz (PROGRES, Liaison—Eastern Europe), Walter R. Stahel (Risk Management); *Heads of Programmes and Research Directors:* Etti Baranoff (Insurance and Finance), Christophe Courbage (Health and Ageing, Insurance Economics), Daniel Haefeli (Insurance and Finance), Anthony Kennaway (Communications), Krzysztof Ostaszewski (Life and Pensions); *Special Officers:* Katsuo Matsushita (Liaison—Japan & East Asia), Gordon Stewart (Liaison—North America), Hans Peter Würmli (Chairman of CRO Network).

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## SCHEDULE OF CONFERENCES ORGANISED AND/OR SPONSORED BY THE GENEVA ASSOCIATION

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### 2012

#### November

|       |           |  |
|-------|-----------|--|
| 5-6   | Paris     | <b>9<sup>th</sup> Annual Liability Regimes Conference on “Evolving Litigation Tactics and Procedures Affecting Liability for Insurers”</b> , hosted by SCOR      |
| 8-9   | Stockholm | <b>9<sup>th</sup> Health &amp; Ageing Conference of The Geneva Association on Genetics and Insurance</b> , co-organised by Länsförsäkringar AB                   |
| 15    | Zurich    | <b>CR+I Working Group meeting</b> (WG members only) hosted by Zurich Insurance Group   |
| 16    | Zurich    | <b>4<sup>th</sup> CR+I Seminar on Adapting to Extereme Events and Climate Risk</b> , defining the strategy of the coming years, hosted by Zurich Insurance Group |
| 28-29 | Munich    | <b>8<sup>th</sup> CRO Assembly</b> , jointly organised with Munich Re  |

#### December

|       |        |   |
|-------|--------|---|
| 3-4   | Geneva | <b>The Four Pillars: The Next 25 Years</b> , hosted by The Geneva Association                                   |
| 10-11 | London | <b>9<sup>th</sup> International Insurance and Finance Seminar of The Geneva Association</b> , hosted by Lloyd's |

### 2013

#### March

|   |           |   |
|---|-----------|---|
| 1 | Amsterdam | <b>15<sup>th</sup> Meeting of the Amsterdam Circle of Chief Economists</b> , hosted by ING ( <i>ACCE members only</i> ) |
|---|-----------|---|

#### April

|       |        |   |
|-------|--------|---|
| 11    | Geneva | <b>The Geneva Association/IAIS Executive Committee High-Level Meeting</b> ( <i>members only</i> ), hosted by The Geneva Association |
| 11-12 | Geneva | <b>29<sup>th</sup> PROGRES Seminar on Insurance Regulation and Supervision</b>  |

#### May

|    |           |   |
|----|-----------|---|
| 10 | Singapore | <b>1<sup>st</sup> Asia CRO Assembly</b> , jointly organised with Swiss Re |
|----|-----------|---|

#### June

|       |          |  |
|-------|----------|--|
| 5-8   | London   | <b>40<sup>th</sup> General Assembly of The Geneva Association</b> ( <i>members only</i> )              |
| 13-14 | Hannover | <b>11<sup>th</sup> ART of CROs</b> , sponsored by Hannover Re ( <i>CROs of member companies only</i> ) |
| 16    | Seoul    | <b>The Geneva Association/IIS Research Award Partnership</b>   |

#### August

|  |         |  |
|--|---------|--|
|  | Beijing | <b>3<sup>rd</sup> Asia Liability Regime Conference</b> , sponsored by Swiss Re China |
|--|---------|--|