NEWSLETTER
INSURANCE ECONOMICS

THE GENEVA ASSOCIATION

No. 70 July 2014

Editorial

By Christophe Courbage[+]

It is my pleasure to present to you this new issue of the Insurance Economics newsletter of The Geneva Association. It starts with two highly topical contributions which should strongly interest researchers in insurance economics. The first one, by Hato Schmeiser *et al.*, looks at the recent European Union ruling prohibiting the use of the gender criterion in insurance pricing. This decision has many implications for the insurance industry and may have a strong economic and legal impact on individual product offering and pricing. The second article, from Philippe Trainar, offers an overview of the concept of alternative capital in (re)insurance. It provides a clear definition of alternative capital, how it is useful and how it relates to traditional reinsurance.

This newsletter also presents the winners of the two main awards that The Geneva Association offers to stimulate and support research in the field of insurance economics. The first one is the Ernst-Meyer Prize, which rewards a doctoral thesis that makes a significant and original contribution to the study of risk and insurance economics. I am very happy to announce that this year's Ernst-Meyer Prize has been awarded to Richard Peter for his doctoral thesis entitled "Essays on Selected Problems in Risk Classification and Risk Reduction". The second prize is the Shin Research Excellence Award, jointly offered with the International Insurance Society, which aims to promote practically oriented, applied research in insurance addressing subjects which directly influence business operations. The topics of the winning papers aptly illustrate the scope of the prize, since one deals with the insurability of cyber risk and the other with natural catastrophic risks, two types of risk that offer challenges and opportunities for insurers.

This newsletter furthermore presents various other activities organised or supported by The Geneva Association, among which is the programme of the forthcoming 41st EGRIE seminar and that of the next Health and Ageing conference on emerging health risks. Another activity is the special issue of The Geneva Papers on longevity risk with Michael Sherris as guest editor. Other activities organised by outside organisations in the field of insurance are also presented.

My hope is simply that all the information shared with you in this newsletter will prove useful towards the development of further research in the field of insurance.

[+] Research Director – Health and Ageing, Insurance Economics, The Geneva Association.

Possible Market Implications of Unisex Insurance Pricing*

By Hato Schmeiser, Tina Störmer and Joël Wagner+

The main reason for different insurance premiums and benefits is the use of different statistically proven risk factors in actuarial calculations for individuals. Basing its ruling on European Union Directive 2004/113/EC (the Gender Directive), the European Court of Justice on 1 March 2011 concluded that any gender-based discrimination is prohibited, so gender equality in the European Union (EU) must be ensured from 21 December 2012. The ruling definitively banning the use of the gender criterion in actuarial calculations for individual prices may have important consequences for the insurance industry and customers in the EU. In this short text, a number of implications are discussed. Possible consumer behaviour and potential responses from market players are outlined as well as possible further regulatory interventions. The implications of the definitive ban on gender-based discrimination are extensive for the insurance industry and may have a strong economic and legal impact on the individual product offering and pricing.

Customer reactions and adverse selection effects

Following the ban on gender-based discrimination, insurers and policyholders will have unequal access to information on gender characteristics, which may result in further adverse selection effects, as described by Akerlof (1970). Even if the gender characteristic of customers is taken into account by the insurer at the overall portfolio level, adverse selection effects are enhanced whenever one group of policyholders has to pay an increased risk premium for a statistically lower risk. This may have an impact on the demand for insurance products, at least for markets with low price inelasticity. In the extreme situation of full adverse selection, the subsidising policyholder group (second group) will no longer take out any insurance policies at all (if not compulsory or critical; see Thiery and Van Schoubroeck, 2006) and thus in the long run, the portfolio may be formed solely by the members of the first group, which has a higher claims expectancy. Prices will be adjusted accordingly and finally, only one price—the one for the more costly policyholder group—will remain. Furthermore, cross-subsidies between insurance groups of different genders are implied. The higher claims expectancy of the one group will be distributed to all other policyholders of the second group.

The resulting decrease in customer demand may lead to a future limitation on the product offering and to a possible withdrawal by competitors from certain less profitable product lines. Once insurance solutions have been abandoned, substitute products may become attractive. Forms of self-insurance or mutual/investment funds for retirement arrangements may be preferred. Overall, the insurance market may decrease in size along with the quality of the insurance benefits. These effects may be stronger in the annuity and life insurance market, as such insurance is not compulsory, unlike motor insurance, for example (Oxera, 2011).

On the other hand, for compulsory insurance lines (for example, motor insurance), further moral hazard behaviour may occur, meaning that excessive risks may be taken and that the average risk level may increase.

Finally, let us note that the ban on gender-based discrimination may also give rise to positive reactions from consumers. For example, customers may perceive the insurance industry as ethically and socially better or even more consumer-friendly—especially in light of the fact that effective gender-specific price differences are less accepted.

Possible reactions by the insurance industry

From an insurance industry perspective, several new challenges arise regarding product development and actuarial calculation. Owing to unisex pricing, it is no longer possible to use gender as a risk criterion for individual pricing of policies. In accordance with the provisions of paragraph 17 of the Guidelines on the Application of the Gender Directive, "the use of risk factors which might be correlated with gender […], as long as they are true risk factors in their own right" is allowed. Thus, a calculation of the risk of damage cannot only take place at the level of the insurance portfolio (including the consideration of gender). However, the definitive premium only represents a

* This article is extracted from an original paper published as: Schmeiser, H., Störmer, T.and Wagner, J. (2014), "Unisex insurance pricing: consumers' perception and market implications", *The Geneva Papers on Risk and insurance – Issues and Practice*, 39(3): 322–350.

+ The three authors are from the Institute of Insurance Economics, University of St. Gallen, Kirchlistrasse 2, 9010 St. Gallen, Switzerland.

mixed tariff (which may be a weighted average by the gender-mix in the portfolio). The results are adverse selection of policyholders and hybrid product tariffs (GCAE, 2011). Because the use of the gender criterion is no longer allowed, market distortion will result. Cross-subsidisation from high-risk policyholders to low-risk policyholders will result.

To achieve an equitable spread of risks in their portfolio, insurers may provide increased direct incentives to specific target customers. Strategic marketing may then include gender-specific sales campaigns (for example, in magazines with a strong gender-specific readership) and gender-specific individual product offerings (EC, 2012). In addition, insurance companies may make increasing use of risk criteria which are correlated with gender if they are independent risk factors, for example, the size of a car engine for motor insurance (EC, 2012). The available customer data will be increasingly analysed and correlated risk criteria developed without having to establish a direct reference to gender. Furthermore, the importance of the use of other risk factors independent of the gender criterion may increase, for example, for motor insurance, the length of the customer's driving experience, vehicle safety features and maybe (in the near future) driver tracking technology. These effects lead to a reduction of adverse selection, as the pricing will be based on several risk criteria (not including gender) that may end up mapping risks more precisely than today's use of the gender criterion alone. We will keep in mind, however, even if this price ends up being more equitable, that one factor (namely gender) still remains unused. The transaction costs as well as the administration expenses and the risk premium may increase for insurance companies (Kochskämper, 2011).

An additional opportunity for portfolio selection is through the modification of the sales commission and through incentives to sales staff, for example, higher commissions for acquiring customers from among the lower-risk gender. The result can be a deliberate exclusion of customers in specific tariffs (for example, private insurance, where acceptance of customers is not compulsory under applicable law) and hence, an increase in the adverse selection phenomenon (Kochskämper, 2011). The termination option of existing contracts emphasises this effect. Current customers may terminate their old contract and conclude a new one with the unisex tariffs if the latter are more favourable (depending on the product line and the individual gender). In particular, contracts that can generally be terminated at short notice may imply relatively fast reactions (see, for example, yearly contracts for motor or private health insurance policies) and changes in the insurer's portfolio composition. Brokers and their corresponding commission scheme for contract renewals may accelerate this trend. Hence, additional transaction costs will be paid by switching policyholders until a new equilibrium with one unisex price is finally established in the market (Kochskämper, 2011). An increased premium level in unisex tariffs could merely cushion this effect. The aforementioned study by Oxera (2011) predicts that the gender-neutral uniform tariff could result in higher premiums for one or the other gender depending on product lines. On the one hand, a 40-year-old woman may have to pay over 30 per cent more for life insurance, while a 20-year-old woman could have to pay 11 per cent more for motor insurance. On the other hand, a 50-year-old man could pay 5 per cent less for annuity insurance.

In an insufficiently competitive oligopolistic market, higher average prices due to market-sharing agreements may result. Gender-neutral premiums may be higher than the accumulated previous rates weighted for men and women because of adverse selection. In part, this is because it is more difficult to calculate an alternative risk criterion by collecting and evaluating data regarding the social and economic circumstances of an insured person, and a risk premium may be levelled. Furthermore, those risk factors can change over time and, therefore, may indicate a higher uncertainty for insurers. In addition, in the aforementioned preferred group of policyholders, a "levelling down effect" may be observed and, in the previously disadvantaged group, a "levelling up effect".

The contemplated effects depend, for example, on the amount of the premium, the benefit differences, the transparency of premium calculation for policyholders and finally, on the action that customers take to switch tariffs. It is expected that some customers will buy fewer insurance policies due to higher premiums. Policyholders with a better-than-average risk profile may churn, and the average risk may increase because of adverse selection. To cover the average risk probability and the uncertainty, insurance companies could adopt premium loading or raise the safety margin.

Regulatory intervention

The gender-neutral premium calculation requires major changes on the part of insurance companies. It may be expected that alternative risk criteria or combinations of risk criteria will take more precedence, for example, "risk factors which might be correlated with gender, as long as they are true risk factors in their own right", for example for motor insurance, car engine size (EC, 2012). It therefore follows that a prohibition of the use of the single gender criterion does not automatically result in gender neutrality in insurance pricing (ABI, 2010). Such reactions from the insurance industry may lead to further governmental or regulatory intervention in pricing and product development. At the moment, pursuant to Paragraph 18 of the Guidelines on the Application of the Gender Directive only the use of the gender criterion is prohibited (EC, 2012). In November 2000, the EU Council adopted Directive 2000/78/EC for establishing a general framework for equal treatment in employment and occupation independent, for example, of someone's age. Furthermore, the Commission of the EU decided in July 2008 in a proposal for a Council Directive to implement "the principle of equal treatment between persons irrespective of religion or belief, disability, age or sexual orientation" outside the field of employment. The ban on other differentiation criteria, for example age or health status, may result. Each intervention in the pricing mechanism may lead to market distortions and may impair the principle of (statistically) fair contributions and benefits.

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Alternative Capital in (Re)insurance

By Philippe Trainar*

What do we mean by alternative capital?

What is capital? Economists have isolated three notions of capital that overlap but are not identical. The first and most usual meaning of capital is the long-term, i.e. perpetual, financing of companies. As such, it is equivalent to shares. Capital is, therefore, an investment which can take the form of an illiquid asset (typically, industrial equipment for doing business) or a liquid asset, i.e. an asset you can easily sell when needed. Last but not least, capital in the form of shares is associated with voting rights. As such, it is a source of power in the company as soon as you are able to amass sufficient shares in order to get a blocking minority or a majority, in stand-alone or in association with other shareholders.

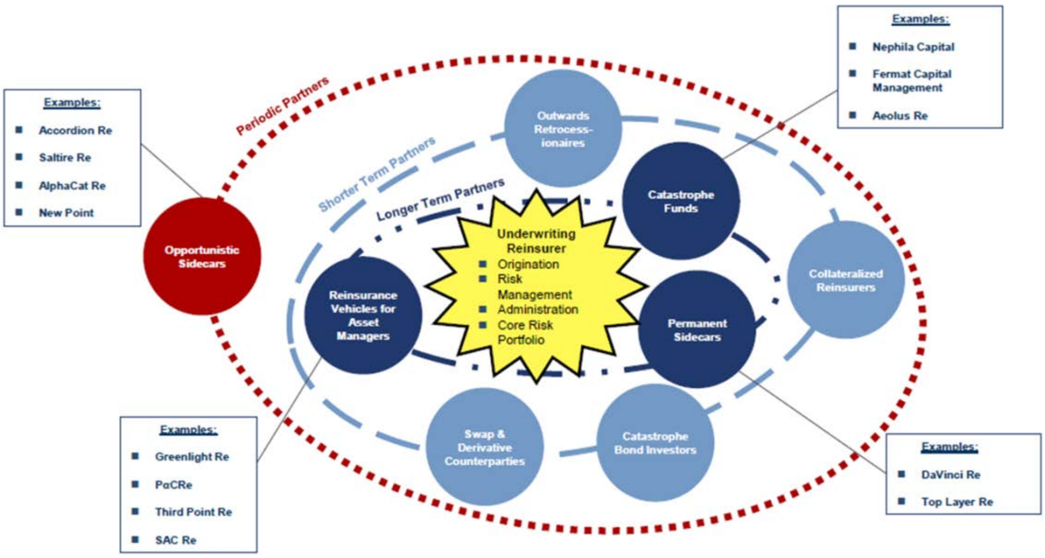
What changes when I add "alternative" to capital? What is alternative capital, especially with regard to capital? It is not a well-defined notion, but rather, a subjective concept, each expert filling it with a specific content. Of course, the different contents have a lot of common ingredients, the first one being the fact that it is not traditional. I suggest we adapt ourselves to this negative definition and try to characterise what has been currently subsumed under it. For that purpose, I propose a rather large definition that is influenced by the regulatory definition of capital: alternative capital is able to absorb losses, in (re)insurance companies for what concerns us, but it is not, or at least not yet, part of the shareholders' capital of the insurance company.

* Chief Economist, SCOR Group.

Strictly speaking, alternative capital can take on many forms in insurance. Nevertheless, I suggest to later focus on those forms which are provided by financial markets or private placements. The table below tries to give a quick description of the variety of forms taken by the alternative capital in (re)insurance: their nature, their precise form, their normal time horizon, their collateralisation, their accounting and their origin.

Nature of the Instrument	Precise Form	Time Horizon	Collateralisa-tion	Accounting	Origin
Insurance contracts	- Reinsurance (incl. retrocession) - Collateralised Reinsurance - Monetisation of VIF[1]	- Short term - Short term - Multi-year	No Yes Yes	by profit and loss (PL) account	Reinsurance private placement
Insurance-linked securities	- Cat bond, ILW,[2] CWIL[3] - Sidecar - Mortality bond/swap - Longevity bond/swap - Monetisation of VIF	- 2–4 years - Multi-year - 3–5 years - 30 years - Multi-year	Yes	in profit and loss account	Financial markets
Contingent equity line	Catastrophe equity put	3 years	No	by balance sheet	Financial markets
Other contingent capital	- Hybrid debt - Equity conversion - Write-down CoCos	- Perpetual - Multi-year - Multi-year	Yes	by balance sheet + PL at the write-down	Financial markets

In fact, as represented in the graph below, the (re)insurance risk transfer universe encompasses long-term partners, i.e. the traditional reinsurer, and shorter-term partners in many forms such as collateralised reinsurers, cat bond investors, permanent sides and special vehicles for assets manager as well as periodic partners, i.e. the opportunistic sidecars which have recently emerged. Alternative capital covers the two last categories of risk transfers.



Source: SCOR.

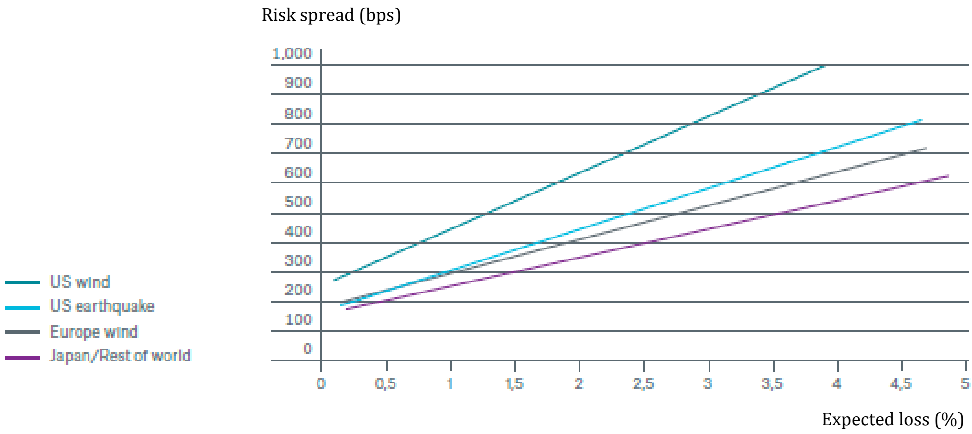
[1] Value in force.
[2] Industry loss warranty.
[3] County weighted industry loss.

Why is alternative capital useful?

We have seen an increasing amount of alternative capital flowing into the (re)insurance industry. The reason for this attractiveness is manifold. First of all, it is, for investors, a very attractive investment for three main reasons:

- The remuneration, i.e. LIBOR plus a spread depending on the expected loss, is in itself attractive compared to a risk-free interest rate, for example (cf. graph 1)

*Graph 1. Cat bond pricing forecast**

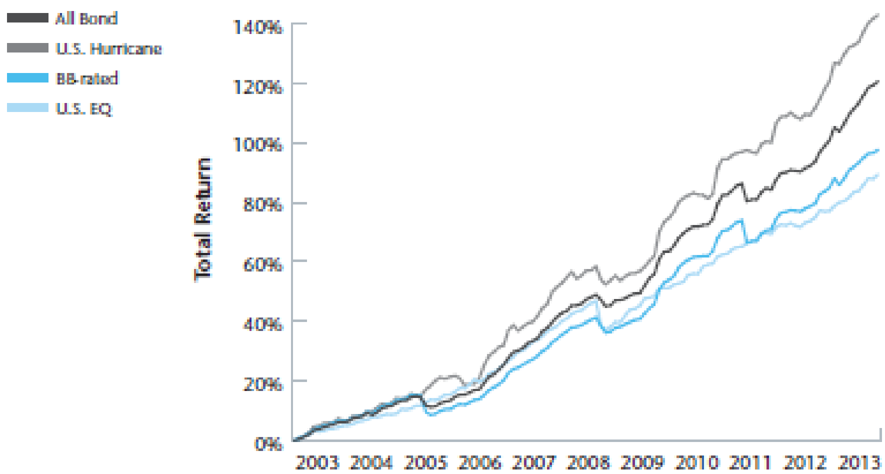


Source: Munich Re (2013), p. 6.

* Diversifying perils are Pacific Hurricane in Mexico, European Windstorm, Australia Cyclone, Japanese Typhoon and Japanese, Turkish and Mexican Earthquake.

- This remuneration is especially attractive in an environment of very low interest rates, as you can get, at least at short term, a higher remuneration combined with lower volatility (cf. graph 2). Of course, this has no reason to last forever.

Graph 2. Historical performance of Aon Benfield ILS indices

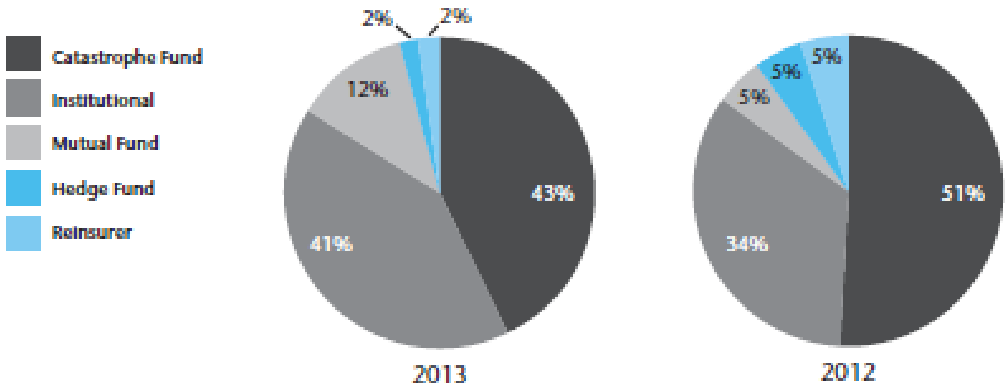


Source: Aon Benfield (2013a), p. 21.

– Last but not least, it is an attractive source of diversification for investors because of its decorrelation from financial risks. This is all the more attractive as investors have the impression of being saturated with financial risk.

Alternative capital helps to reduce the risk premium on insurance risks. It effectively reduces the volatility of investors' portfolios thanks to its contribution to diversification. Moreover, it fragments the risk into smaller pieces. This fragmentation is already done by reinsurance (for example, SCOR has 4,000 clients, and a much larger number of shareholders, i.e. 30,000), but only partially in comparison to financial markets and alternative capital. Investors in alternative capital are dominated by investors that are adding their contribution to the pool of existing investors in reinsurance (cf. graph 3).

Graph 3. Investor by category (Years ending June 30)



Source: Aon Benfield (2013a), p. 13.

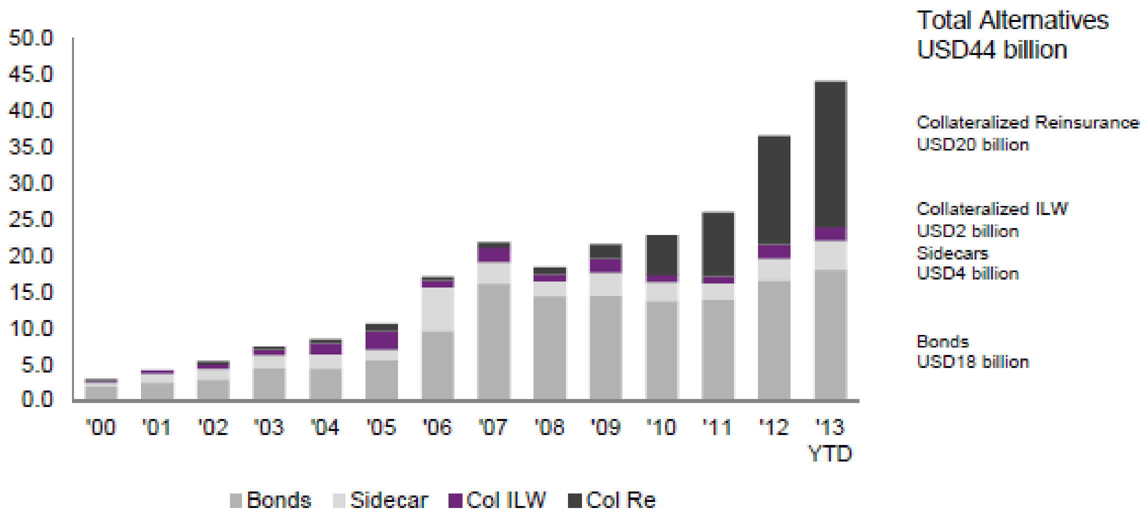
Finally, alternative capital helps solve a few insurance challenges. It enlarges the market capacity for covering extreme losses, whose need is growing rapidly, when traditional capital is becoming scarcer because of Basel III and Solvency II regulations. A seldom noticed effect concerns the improvement of the safety of the cover for non-extreme risks and clients, as it improves the coverage of the most extreme events (nat cat, pandemic, etc.) and therefore reduces the probability that one of these extreme events might put the company in default and damage those clients that are insured for other risks. In fact, underwriting of extreme events introduces inequality between clients according to the kind of event they are protected from, but, by targeting extreme events, alternative capital reduces or even eliminates this inequality. Moreover, it helps arbitrage excessively demanding regulations in favour of more rational regulations. It could be able to provide monetisation opportunities for future profits, again, even if currently the amount of money available for that purpose is rather limited because of the financial crisis and the relative aversion of investors for this kind of operation, and it is difficult to manage incentives. Of course, as other market innovations, it helps reveal hidden information on costs and risk aversion.

Importantly, most alternative capital operations are recognised by (re)insurance regulators and supervisors. Solvency I, since the reinsurance directive, recognises them, subject to authorisation. Solvency II goes a step further in the recognition of alternative capital by abolishing quantitative limits and by embedding alternative capital in the standard formula and by allowing internal models to incorporate it.

Which articulation between alternative financial markets and traditional reinsurance?

These two techniques of transferring risk out of insurance companies are currently in competition, not overall but for certain risk categories, i.e. extreme risks for which sufficient reliable data and expert judgements are available. For these risk categories, they are more or less interchangeable, at least for big insurers. Because of the increasing liquidity of the market, competition is also increasing between these two techniques, with a growing role given to alternative capital (cf. graph 4). This competition puts significant pressure on certain lines of business and their pricing, especially with regard to natural catastrophes in the U.S. in Florida, which is a highly opportunistic market.

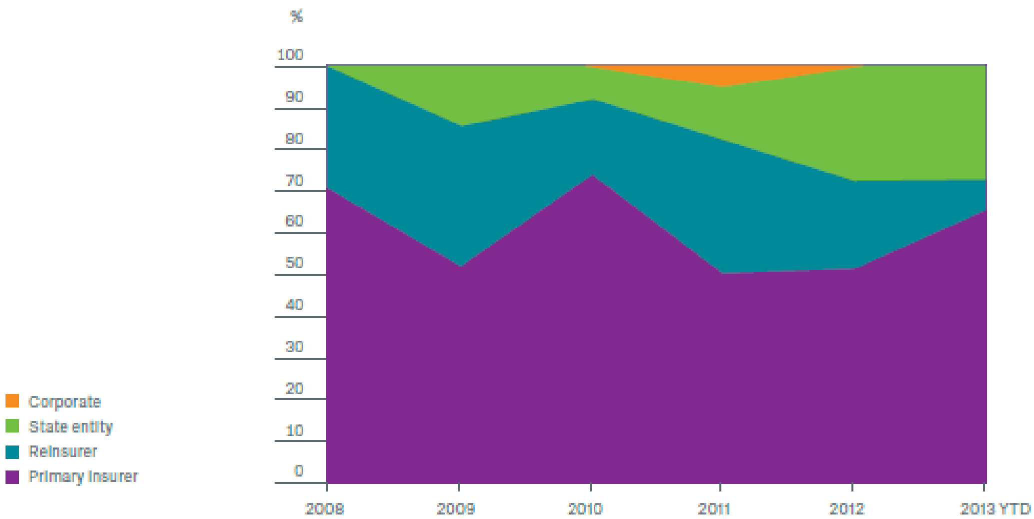
Graph 4. Bond and collateralized market development



Source: Aon Benfield (2013b), p. 5.

Nevertheless, one should not overestimate this competition which is more confined than often thought because of the intrinsic limitations of alternative capital. First of all, current exceptionally low interest rates for an exceptionally long period of time have artificially and temporarily boosted the attractiveness of alternative capital, as explained above. Even if the perspectives for the European Central Bank (ECB) and the eurozone are those of a protracted period of very lax monetary policy, one can currently perceive the first advanced signals of a changing mood of monetary authorities in the U.K. but also in the U.S. Moreover, the expansion of the cat bond markets is largely due to state entities and not to private (re)insurers and to a structural change on the market (cf. graph 5).

*Graph 5. Cat bond Issuance volume split into sponsor types**



Source: Munich Re (2013), p. 4.

* Cat bonds with Euro-denomination were converted into $-amounts using the exchange rate on the respective day of issuance.

Because of asymmetric information, alternative capital market is focusing on strictly targeted risks, mainly well modelled ones and peak risks, i.e. on very high layers with low rates on line, which represents a limited share of the overall reinsurance business. A basis risk remains in case of (semi-)parametric products. It can be substantial, esp. for cat bonds, and it can only be covered by a reinsurance arrangement, with the consequence that alternative capital and reinsurance are complementary from that point of view. Of course, indemnity based ILS are gaining momentum, representing more than half of sponsored cat bonds in 2013, but this appetite of investors for indemnity based ILS is particularly driven by the current financial environment of very low interest rates. One has also to notice that there remain potential legal and regulatory uncertainties that have not yet affected the alternative capital market, as few cat bods have been triggered until now; they could affect alternative capital market substantially as cat bonds, for example, become more common and their probability of being triggered increases, as demonstrated by the current lawsuit concerning the Mariah Re cat bond filed in 2011. Moreover, there remain many significant differences between alternative capital and reinsurance which substantially limit the scope for potential competition between them: loss trigger, emergency and speed of loss settlement, etc.

In fact, alternative capital and reinsurance appear to be as complementary as substitutable techniques. First of all, reinsurers are contributors to alternative capital markets, which are an investment and risk-taking opportunity. Reinsurers have been providing 5 per cent of total alternative capital in 2012 and 2 per cent in 2013. But, the converse is also true: alternative capital is a capacity that is available to big companies and to direct insurers as well as to reinsurers. In fact, reinsurers are largely using it by issuing cat bonds or mortality bonds so that one-third of alternative capital is backing reinsurers.

Moreover, reinsurance, as a long-term actor, plays a role that alternative capital, as an opportunistic actor, is not able to play. Notably, reinsurance contributes to the completeness of the risk transfer market. Reinsurance is a continuously open and available source of protection, even at the height of financial crisis, when financial markets, and alternative capita with them, can be closed when protection is most needed, whatever its price, as was the case for many months after the collapse of Lehman Brothers. As we have seen, reinsurance is able to cover the basis risk left uncovered by (semi-)parametric ILS. More generally speaking, reinsurance contributes to stabilising prices as it is well-equipped for fine-tuning diversification and smoothing shocks, while alternative capital magnifies the consequences of shocks, as they are not able to sufficiently diversify their portfolio of risks and need therefore to pass on, in their prices, the costs of major shocks.

It is up to 1st tier, well-diversified reinsurers to address the challenges of these complementarities by optimising the "diversify and disperse" model which is emerging with alternative capital and which support and improve the quality of the reinsurance service. The current value destroying dimension of alternative capital in reinsurance is not due to the alternative capital as such but to the currently too lax monetary policy, which creates a bubble by artificially but substantially boosting the attractiveness of alternative capital.

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News from EGRIE

Programme of the 41st EGRIE Seminar

15–17 September 2014, St. Gallen, Switzerland

Monday 15 September

08:00–08:45 Registration and Welcome Coffee

08:45–09:00 **Welcome Speech**

09:00–10:30 **Geneva Risk Economics Lecture**
H. Schlesinger
Lattices and Lotteries in Apportioning Risk

11:00–12:20

Session A1
Loss control conflicts

C. Courbage, H. Loubergé, R. Peter
"Optimal Prevention for Correlated Risks"

D. Crainich, L. Eeckhoudt
"Average Willingness to Pay for Disease Prevention with Personalized Health Information"

Session A2
Interest rates

E. Berdin, H. Gründl
"The Effects of a Low Interest Rate Environment on Life Insurers"

G. Millo, P. Millossovich
"Interest Rates and the Demand for Non-Life Insurance: Evidence from Italian Sub-Regions"

14:00–16:00

Session B1
Behavioral session

F. Pannequin, A. Corcos, C. Montmarquette
"Insurance and Self-Insurance: Beyond Substitutability, the Mental Accounting of Losses?"

S. Ebert, C. Hilpert
"The Trend is Your (Imaginary) Friend - A Behavioral Perspective on Technical Analysis"

K. Werner
"Insurance Demand and Heterogeneity in Risk Perception"

Session B2
Moral hazard and adverse selection

K. Shaver
"Insurance Competition under Asymmetric Categorization: Evidence from the Washington Automobile Insurance Market"

M. Eling, R. Jia, Y. Yao
"Evidence of Adverse Selection in the Group Insurance Market"

C. Biener, M. Eling, A. Landmann, S. Pradhan
"Ex-Ante *Moral Hazard: Experimental Evidence from Low-Income Insurance"*

16:30–17:50

Session C1
Correlation aversion

W. H. Chiu
"Correlation-Increasing Marginal Risk Increase and Financial Risk Taking in the Presence of Non-Financial Background Risks"

D. Crainich, L. Eeckhoudt, O. Le Courtois
"An Index of (Absolute) Correlation Aversion: Theory and Some Implications"

Session C2
Adverse selection

Y. Yao, J. T. Schmit , J. R. Sydnor
"Adverse Selection in Emerging Health Insurance Markets: Evidence from Microinsurance in Pakistan"

J. Bauer, J. Schiller, C. Schreckenberger
"Selection in the Market for Private Supplemental Dental Insurance in Germany"

Tuesday 16 September

08:30–10:30

Session D1
Investment

D. Bauer, S. Kamiya, X. Ping, G. Zanjani
"Dynamic Capital Allocation with Irreversible Investments"

Session D2
Pension funds and life insurance

T. Boonen, A. De Waegenaere, H. Norde
"Intergenerational Solidarity within a Closing Pension Fund"

	S. Ben Ammar, M. Eling, A. Milidonis *"Asset Pricing of Financial Institutions: The Cross-Section of Expected Insurance Stock Returns"*	R. Inderst, A. S. Sirak *"Income and Unemployment Effects on Life Insurance Lapse"*
	K. Fu, Y.-C. Hsu, R. Huang, L. Tzeng *"Does Portfolio Insurance Outperform Stocks? Evidence via Almost Stochastic Dominance"*	A. Braun, H. Schmeiser, F. Schreiber *"On Consumer Preferences and Willingness to Pay for Term Life Insurance"*
11:00–12:20	**Session E1** **Decision** C. Heinzel, R. Peter *"Precautionary Motives under Multiple Instruments"*	**Session E2** **Market discipline** M. Grace, S. Kamiya, R. Klein, G. Zanjani *"Market Discipline and Guaranty Funds in Life Insurance"*
	M. D. Adler, N. Treich *"Consumption, Risk and Prioritarianism"*	M. Dong *"The Impact of Firm-Level Transparency on the* Ex Ante *Risk Decisions of Insurers: Evidence from an Empirical Study"*
13:30–15:30	**Session F1** **Regulation** P. Zweifel *"Solvency Regulation of Banks and Insurers: A Two-pronged Critique"*	**Session F2** **Organisations** S. Kamiya, A. Milidonis *"Actuarial Independence and Managerial Discretion"*
	J. G. Jaspersen, A. Richter, S. Soika *"On the Demand Effects of Rate Regulation – Evidence from a Natural Experiment"*	C. Biener, M. Eling, J. H. Wirfs *"The Determinants of Efficiency and Productivity in the Swiss Insurance Industry"*
	M. Altuntas, T. R. Berry-Stölze, S. Wende *"Does One Size Fit All? Determinants of Insurer Capital Structure around the Globe"*	K. C. Wang *"Private Information and the Incentive to Engage in Fraud"*

Wednesday 17 September

08:30–9:40	**Session G1** **Pricing insurance** C. Cheng, J. Li *"Early Default Risk and Surrender Risk: Impacts on Participating Life Insurance Policies"*	**Session G2** **Ambiguity** Y. Fujii, H. Iwaki, Y. Osaki *"An Economic Premium Principle under the Smooth Ambiguity Aversion"*
	N. Gatzert, S. Pokutta, N. Vogl *"Convergence of Capital and Insurance Markets: Consistent Pricing of Index-Linked Catastrophic Loss Instruments"*	L. Berger *"The Impact of Ambiguity Prudence on Insurance and Prevention"*
10:10–11:30	**Session H1** **Risk measures** S. Kou, X. Peng *"On the Measurement of Economic Tail Risk"*	**Session H2** **Flood insurance** M.J Browne, C.A Dehring, D.L Eckles, W.D Lastrapes *"Does National Flood Insurance Program Participation Induce Housing Development"*
	D. Pankoke *"Sophisticated vs Simple Systemic Risk Measures"*	G. Turner *"Insurance Demand After a Rare Flood Event: Evidence from a Field Experiment in Pakistan"*

Summary of the 16th Annual Circle of Chief Economists Meeting

By Christophe Courbage

On 26–27 February 2014, the 16th meeting of the Annual Circle of Chief Economists took place in Munich, graciously hosted by Munich Re. The meeting brought together a special group of chief insurance economists and strategists from Members' companies of The Geneva Association to interchange ideas and views on current, relevant economic affairs in insurance. About 20 participants attended the meeting representing Allianz, Hannover Re, VidaCaixa, Zurich Insurance Group, Munich Re, Generali, SCOR, Swiss Re, Everest Re, the German Insurance Association (GDV), the Insurance Information Institute, the Italian Insurance Association (ANIA) and Crédit Suisse.

The opening speech on "Munich Re's perspective on climate change in the light of the 5th IPCC Assessment Report" was delivered by Ernest Rauch, Head of the Corporate Climate Center at Munich Re. The presentation started with an overview of the structure and work of the Intergovernmental Panel on Climate Change (IPCC). The main findings of the 5th IPCC Assessment Report were then presented. According to this report, over the period 1880–2012, globally, the average combined land and ocean surface temperature increased by 0.85 °C (linear trend). It is also extremely likely (>95% likelihood) that more than half of the observed increase in global average surface temperature from 1951–2010 was caused by anthropogenic factors. The presentation then moved to Munich Re's strategic approach with regard to climate change and natural catastrophes, which is articulated around three angles. The first one concerns risk assessment and, in particular, the development of research on natural hazards and climate change impacts. The second one focuses on the business potential for becoming the leading insurer of transfer solutions for renewable energies. The third one relates to asset management with new investment options. Finally, natural catastrophes losses were addressed, and, contrary to what is commonly believed, normalised insurance losses are not shown to increase significantly globally, but only regionally.

The second speaker was Michael Wolgast, at the time head of economics at the German Insurance Association, who made a presentation on "macroprudential supervision and insurance: curse or blessing?" The presentation started by recalling what macroprudential supervision is about and by stressing that macroprudential activities are justified, as, prior to 2008, these activities were not sufficiently developed to prevent the 2008 financial crisis. The macroprudential framework concerns three main fields, namely, systemic risk reduction and increased resilience of the financial system, a new supervisory framework for SIFIs, and macroprudential surveillance. Macroprudential policy is a complex landscape with various bodies being involved, raising the question of the adequate model to be implemented. Macroprudential policy is beneficial for insurance if it leads to a less volatile environment and smoothes economic growth. It can be negative if it implies overlapping competencies, a greater bureaucratic burden and the domination of banking expertise. The presentation then moved into the issue of the provision of data for macroprudential supervision, which is a difficult issue as it raises the question of excessive data requirement and whether a single point of entry via the insurance supervisor can be maintained for the supply of data. Finally, current topics for macroprudential supervision were addressed including low interest rates, euro debt crises, regulatory reform, changes in asset strategy, interconnections with other financial institutions, underwriting risk, inflow of alternative capital, etc.

The third speaker was Daniel Hofmann, Advisor to the Chairman of the Board, at Zurich Insurance Group, who addressed the topic of "global ambition vs local implementation in the current regulatory challenges". The presentation highlighted the fact that there are tensions arising from the aspirations of global regulators (driven by the Financial Stability Board (FSB) and the International Association of Insurance Supervisors (IAIS), for example) and their incomplete and often conflicting implementation by local jurisdictions. This is particularly the case when it comes to systemic risk, the insurance capital standard and ComFrame. The result of these tensions is a fragmentation of the regulatory landscape with scant evidence of convergence among supervisors that is likely to be costly for internationally active insurance groups and also to foster regulatory arbitrage. According to M.Hofmann, to mitigate these challenges, insurers are required to assume more responsibility towards society and restore the public's trust in self-regulation. The presentation ended with various recommendations. In particular, the insurance industry needs to actively engage with regulators and standard-setters to create a dynamic framework for globally consistent insurance regulation and supervision and to facilitate efficient capacity allocation.

The fourth speaker was Valérie Plagnol, Chief Economist at Crédit Suisse, who made a presentation on "global growth rebalancing in favour of advanced economies". The presentation offered an overview of the macroeconomic perspectives of the main economy worldwide. According to Ms Plagnol, global growth is mainly led by advanced economies, and generally low inflation leaves monetary policies supportive. However, the heavy political agenda may also impact the economic outlook.

The fifth speaker was Philippe Trainar, Chief Economist at SCOR, who made a presentation on "alternative capital in (re)insurance". The presentation was organised around three themes. It started by explaining the meaning of alternative capital, then it addressed why alternative capital is useful and it ended by highlighting the articulation between alternative financial markets and traditional reinsurance. More substance on the content of this presentation appears in this newsletter in an article written by Philippe Trainar.

Finally the meeting ended with a presentation by Lorenzo Savorelli and Giovanni Millo from the Research and Development department at Assicurazioni Generali on the topic of "the growing insurance gap in developed and emerging countries?" According to the authors, the insurance gap is the difference between insurance needs and insurance in force. Various factors are known to explain this insurance gap, and the presentation contributed a worldwide view on how insurance gaps are evolving using various databases and recent econometric models. While GDP growth is often identified as the main driver of the insurance penetration rate, the authors did not find any statistical relationship between insurance penetration and GDP growth using aggregate data. Other factors than GDP growth could therefore explain insurance penetration, which constitute the next steps of the research undertaken by the authors.

Ernst-Meyer Prize Winner for 2013

The Geneva Association awards the prestigious Ernst-Meyer Prize (CHF5,000) annually for university research work in the form of a doctoral thesis which makes a significant and original contribution to the study of risk and insurance economics.

The 2013 Ernst-Meyer Prize awarded in 2014 went to Richard Peter for his LMU Munich PhD dissertation entitled "Essays on Selected Problems in Risk Classification and Risk Reduction". We wish to congratulate him and give our readers the opportunity to learn more about his work.

"Essays on Selected Problems in Risk Classification and Risk Reduction", by Richard Peter

This thesis consists of four papers on the economics of risk and insurance. The first paper, "Yes, No, Perhaps?—Premium Risk and Guaranteed Renewable Insurance Contracts with Heterogeneous In-complete Private Information", analyses a situation in which consumers are exposed to classification risk. When future risk types are uncertain and contracts are risk-rated, classification risk emerges as future premiums become risky. Guaranteed renewable (GR) contracts, as introduced by Pauly et al. (1995) and extensively discussed in health insurance, are one way of covering individuals' premium risk: the future insurance premium is fixed *ex-ante* against payment of an additional surcharge. The paper investigates pooled GR contracts that fully insure premium risk. If information was homogeneous across the population, every risk-averse individual should cover herself against premium risk. This is not observed on real markets. If private information is heterogeneous in the sense that each customer has an individual perception of her likelihood of becoming a low risk in the future, partial take-up can arise. The paper develops a sufficient condition for that case. It is more easily satisfied with increased risk aversion, with a wider gap between risk types and when the signal distribution is improved according to first-order stochastic dominance.

Under certain assumptions the condition is also necessary. Furthermore, the highest cut-off dominates all lower ones in the Pareto sense and is the Nash equilibrium in the market under some technical conditions. Also, take-up is lower if information is more dispersed. Hence, the market for GR contracts might unravel completely due to reasons of adverse selection, but also partial take-up can be sustained in equilibrium. Then, not every-body can be covered against premium.

The second paper, “Endogenous Information and Adverse Selection under Loss Prevention”, examines a situation in which individuals can obtain information about risk, e.g. through a genetic test. The value of this information is determined by the insurance contracts available, given the consumers’ level of information, and by endogenous actions taken by individuals. These actions are modelled as loss-prevention activities, i.e. an effort that reduces the probability of loss. Motivated by empirical observations, it is natural to assume that all risk types exert a specific kind of effort that reflects their level of information, even the uninformed and low risks. This (clinical) productivity of information raises the endogenous value of information in a situation with symmetric information so that reclassification risk can be overcome. Furthermore, allowing individuals with a favourable test result to reveal it to the insurance company increases the value of information, and so does the ban of using informational status for rate-making. In the first case, the reason is that low risks no longer suffer from the externality imposed by unidentified high risks, in the second case the expected utility of uninformed individuals shrinks as they can no longer be fully insured. However, an increase in the value of information can be accompanied by a decrease in social welfare due to the fact that in some situations uninformed individuals prefer staying uninformed and fully insured under one regime over taking up the test to avoid partial insurance under another regime. Overall, the degree of productivity is an important determinant of the value of information and is, of course, heterogeneous across information devices. Therefore, a uniform regulatory approach can hardly be suitable.

The third paper, “Optimal Loss Prevention and Prudence under Endogenous Consumption”, investigates the relationship between prudence and loss-prevention expenditures. Monoperiodic models suggest a negative link, whereas intertemporal models seem to suggest a positive link between the two. The paper shows that, in an intertemporal context, saving appears as a natural substitute for prevention. Both activities imply reduced current consumption to increase expected future consumption via a smaller probability of loss in the case of prevention, or via increased wealth in all future states in the case of saving. This substitution effect only prevails if saving is endogenous. Therefore, without saving there is no relationship between prudence and prevention, i.e., prudence is neither necessary nor sufficient to generate more prevention. For specific savings choices, that are not generically optimal, the relationship between prudence and prevention is positive, i.e. the prudent individual spends more on prevention than a prudent-neutral individual. Lastly, if savings are endogenised, the link between prudence and prevention becomes negative, i.e. a prudent individual spends less on prevention than a prudent-neutral individual. The reason is that via the substitution effect, a decrease in actuarially fair prevention is useful to mitigate downside risk as savings increase and the lowest consumption level increases. At the margin, if the mean and variance are locally flat, decreases in prevention do not change the first two moments, but skewness is increased, which is beneficial in terms of overall expected utility for a prudent individual.

The fourth paper, “Loss Reduction, Loss Prevention and Increased Risk Aversion: An Intertemporal Reinvestigation”, analyses risk reduction decisions in an intertemporal framework. Here the curvature of the utility function measures both the resistance to consumption fluctuations across time and across different states of the world. Again, the level of integration between risk reduction and the savings decision is crucial. In the absence of savings, an increase in risk aversion in the sense of Pratt (1964) leads to higher expenditures on loss reduction or loss prevention if and only if current consumption is above an endogenous threshold. The reason is that risk reduction serves consumption smoothing purposes. So spending more on risk reduction is only beneficial if there is enough money to do so. Furthermore, this result reveals that in the absence of savings, loss reduction and loss prevention react very similarly to changes in risk aversion, contrary to well-known results from monoperiodic models. If, however, savings are endogenised, increased risk aversion leads to more loss reduction in any case, and to more loss prevention if and only if the probability of loss is sufficiently small, i.e., below an endogenous threshold. Here, the savings choice solves the consumption smoothing trade-off so that the behaviour of risk-reducing investments is analogous to monoperiodic models. Therefore, if risk reduction is modelled as an intertemporal decision problem, the level of integration between savings and risk reduction determines the effect of comparative risk aversion.

Inspired by psychology literature and especially by the concept of mental accounting, one can hypothesise that, in the majority of cases, individual decision-makers would fail to integrate both decisions, so that the first model without savings should prevail. Then, the discrepancy between loss reduction and loss prevention vanishes.

All four papers challenge established results and provide extensions in several directions. The first one shows that the degree of heterogeneity of private information determines the success of premium risk protection; the second that productivity of information acquired from testing devices may alter welfare predictions; the third and fourth that the integration between different decisions to mitigate risks is a crucial and so far neglected dimension.

Geneva Association/IIS Research Award Winners 2014

The Geneva Association and the International Insurance Society (IIS) research award is designed to foster original, practically oriented applied research in the insurance area addressing issues of concern to global insurance leaders by examining subjects which directly influence business operations and operational business issues on a practical level.

The organisers—The Geneva Association and the IIS—are pleased to announce the winners of the 2014 Geneva Association/IIS Research Awards Partnership. Authors of each best-qualified paper were awarded $5,000 and invited to present their work at the International Insurance Society's 50th Annual Seminar at London, U.K, 23–25 June 2014.

The two papers along with their abstracts are:

"Insurability of Cyber Risk: An Empirical Analysis", by Christian Biener, Martin Eling and Jan H. Wirfs

In spite of its increasing relevance for businesses today, research on cyber risk is fairly limited. A few papers can be found in the technology domain, but almost no research has been done in the risk and insurance domain. The aim of this paper is to close this research gap in the risk and insurance economics literature and encourage future research on this new and important topic. For this purpose, we provide the first systematic discussion of cyber risk insurability. This paper discusses the adequacy of insurance for managing cyber risk. To this end, we extract 994 cases of cyber losses from an operational risk database and analyse their statistical properties. Based on the empirical results and recent literature, we investigate the insurability of cyber risk by systematically reviewing the set of criteria introduced by Berliner (1982). Our findings emphasise the distinct characteristics of cyber risks compared to other operational risks and bring to light significant problems resulting from highly interrelated losses, lack of data, and severe information asymmetries. These problems hinder the development of a sustainable cyber insurance market. We finish by discussing how cyber risk exposure may be better managed and make several suggestions for future research.

"An Examination of the Geographic Aggregation of Catastrophic Risk", by Randy E. Dumm, Mark E. Johnson, and Charles C. Watson Jr

The debate in the United States about establishing a mechanism for insuring catastrophic wind risk at the national level has been ongoing and pre-dates the substantial losses from the intense 2004–2005 hurricane seasons. The prevailing argument against establishing any larger risk pool is that it would create a subsidy for the higher risk exposures. To determine whether benefits do accrue by aggregating catastrophic risk across increasingly wide geographic areas, the paper uses catastrophe models to evaluate the behaviour of residential property portfolios within the state of Florida and for a larger risk pool that includes multiple combinations of coastal states in the south-eastern United States. The modelling approach used here captures not only wind risk but also the related risk from tropical cyclones including rain, storm surge and waves. As such, this is the first academic paper that utilises a catastrophe modelling methodology to evaluate the broader question of the impact of aggregating catastrophic risk across a larger region on a multiple peril basis. We find that geographic aggregation does not inherently subsidise high-risk exposures, reduces uncertainty, and reduces required reserves relative to total exposure for the least frequent and more severe events. This finding holds true for all state combinations evaluated in this study.

Geneva Association Prizes and Research Grants

Call for Submissions for the Ernst-Meyer Prize 2014

The Geneva Association awards the prestigious Ernst-Meyer Prize annually for university research work in the form of a doctoral thesis which makes a significant and original contribution to the study of risk and insurance economics.

Applications for the award should include all of the following:

- an electronic version (pdf) of the thesis
- an abstract of 1,000–1,200 words in English
- two recommendations (in English), each providing a review of the submitted work
- a curriculum vitae in English.

Further requirements:

- The thesis should have been accepted by the PhD committee during the calendar year preceding the submission deadline.
- Submissions are possible in one of the following languages: English, French, Spanish and German.
- The prize is CHF5,000.
- The deadline for the Ernst-Meyer Prize 2014 is **31 January 2015**.

Applications should be addressed to secretariat@genevaassociation.org, The Geneva Association, "Ernst-Meyer Prize", General Secretariat, route de Malagnou 53, CH-1208 Geneva.

For a full list of past winners, please click here.

Geneva Association Research Grants

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

Each grant is worth CHF10,000 and covers a period of 10 months. The grants are primarily intended for research for a thesis leading to a doctor's degree in economics. Suggested themes and subjects for research grants are:

Economic theory:

• Uncertainty: Imperfect information in deterministic versus indeterministic models • Insurance and risk management in the service economy • Insurability and economic fundamentals • Insurability: privatisation processes and public intervention • The problem of the reinsurer of last resort • Credibility theory (in actuarial sciences) and economics of scale • Comprehensive theories of risk: defining, comparing and integrating pure risks, financial and entrepreneurial risks • Fiscal policy, solidarity and private insurance • Monetary stability and its impact on pure risk management • Systemic risks, the liability portfolio of insurance and pure risk management • The changing role of capital in the contemporary service economy with respect to financial institutions • The economic value of human life.

Economic practice:

• Moral hazard and fraud in the management of pure risks and insurance • Derivatives and their role for insurance on the assets and on the liability side • The economics of health and medical care • The development of technology in specific sectors and their impact on the insurability of risks • Reinsurance markets • The role of government, risk management and insurance institutions with reference to catastrophic and environmental risks • Financing the life cycle, in particular with regard to the increasing life expectancy of persons over 60: the role of insurance and public institutions • Productive activities, employment and health • National and international institutions, their impact on regulation and solvency rules in the insurance market (European Union, World Trade Organization, etc.) • Fiscal policy and reserving for large low-frequency risks • Distribution strategies in insurance • Emerging markets: Problems and opportunities.

For more information please see: www.genevaassociation.org/prizes,-awards-and-grants

Activities Supported by The Geneva Association

Call for Papers

The Geneva Association is pleased to announce
a special **October 2015** issue of

The Geneva Papers on Risk and Insurance – Issues and Practice on **Longevity Risks**

We encourage you to submit contributions related to the following areas:

- drivers of longevity risk protection demand
- insurance and reinsurance solutions for managing longevity risks
- hedging and securitisation of longevity risk in capital markets
- longevity risk transfer markets for institutions and governments
- the structure, growth and drivers of longevity risk transfer markets
- innovations in the longevity market
- regulation and supervision issues in the longevity risk transfer markets
- longevity risk transfer products for individuals (annuities, guaranteed products in life-insurance, equity release).

Suggestions for other topics will be considered by the editor.

All contributions will go through a refereeing process. The guest editor for this special issue is Prof. Michael Sherris (University of New South Wales, Australia). Papers should be submitted electronically via the website of *The Geneva Papers* (http://gpp.msubmit.net/cgi-bin/main.plex) by **7 December 2014** at the latest.

For further information on *The Geneva Papers*, visit http://www.palgrave-journals.com/gpp/

For further information on this special issue, please contact Frederick Schlagenhaft.

Advance Notice and Call for Contributions

6th Extreme Events and Climate Risk Seminar

Extreme Climate and Weather Events in the USA and Globally

Insurance as contributor to problem solving and impact reduction (human life, property, infrastructure and consequential losses)

Organised jointly with and hosted by XL Group
23–24 October 2014, New York, NY

The seminar will look at insurance as contributors to problem solving and impact reduction, with regard to human life, property, infrastructure, and consequential losses. The presentations on the first day will give a U.S. perspective; the presentations on day two will discuss lessons learned from international events. Speakers from the U.S., Europe, China, and South East Asia will talk about their respective regions.

Participants will be executives from public authorities, insurance and reinsurance companies, academia and research institutions, as well as policy makers. The conference will gather up to one hundred participants. Each presentation will be followed by ample discussion time and emphasis is on an active exchange of opinions and discussions.

There is no conference fee. Attendance at the seminar is by personal application. Registration will be accepted on a first-come, first-served basis. The programme of the seminar is available for download on The Geneva Association's website. For further information, please go to www.genevaassociation.org/events/2014/6th-ee-and-cr-seminar.

11^{th} Geneva Association Health and Ageing Conference

Emerging Health Risks and Insurance

6–7 November 2014, Madrid
Hosted by MAPFRE Foundation

Venue: FUNDACIÓN MAPFRE, Paseo de Recoletos, 23, 28004 Madrid

Programme *as of 24 June 2014*

Day 1 Thursday 6 November

10.15–10.45 Registration and Welcome Coffee

10.45–11.00 Welcome Remarks

11.00–13.00 Session 1. Behavioral health risk and insurance

- *Lifestyle risks—Trends and insurability*
  Florian Boecker, Head of Life Solutions, PartnerRe, Zurich
- *How incentivised wellness plans can help insurers manage behavioural health risks*
  Nick Read, Head of the UK Vitality programme, PruHealth, London

13.00–14.30 Lunch Break

14.30–18.00 Session 2. Big data, smart analytics and insurance

- *Big data—a hype or a chance in managing health risks?*
  Dr Achim Regenauer, Chief Medical Director, Munich Re, Munich
- *Digital epidemiology: exploring alternative data sources for predictive underwriting*
  Séverine Rion Logean, Head Life & Health R&D Europe, Swiss Re, Zurich

16.00–16.30 Coffee Break

- *Morbidity data and smart analytics: a success story*
  Daniela Rode, Managing Director, RISK-CONSULTING, Cologne
- *Personalised medicine – Social, ethical, and economic challenges*
  Dr Harry Telser, Deputy CEO, Polynomics, Olten

18.00 End of Day 1

19.00 Cocktail

19.45 Conference Dinner

Day 2 Friday 7 November

9.00–11.00 Session 3. Pandemics, antimicrobial resistance and insurance

- *Emerging pandemic risks*
  Dr Gordon Woo, Catastrophist, Risk Management Solutions (RMS), London
- *Pandemics and other medical risks in life and disability insurance*
  Erik Alm, General Manager, Hannover Re Life & Health, Sweden
- *Antimicrobial resistance*
  Prof. Luis Martínez-Martínez, Chief of Service of Microbiology, University Hospital Marqués de Valdecilla, Santander

11.00–11.30 Coffee Break

11.30–13.00 Session 4. Environmental health and insurance

- *Environmental health – potential business opportunities and risks for insurers*
  Steve Hales, Head of Global Life, Assicurazioni Generali S.p.A, Trieste

13.00 Farewell Buffet Lunch

Other Calls for Papers

Call for Papers

CEAR/MRIC Behavioral Insurance Workshop 2014

15–16 December 2014, Munich, Germany

The CEAR/MRIC Behavioral Insurance Workshop invites researchers to submit papers that offer new experimental, econometric or theoretical insights into human behaviour in the insurance context. Submissions should have an insurance and/or decision under risk and uncertainty background and establish a link to non-traditional demand or supply theories.

Behavioural economics and behavioural finance typically incorporate cognitive and social factors in modelling economic decisions. These include decisions made by the buyers and sellers of insurance-related products. The field of behavioural insurance attempts to explain many of the discrepancies between theories and observations within insurance markets.

The workshop will be hosted by the Munich Risk and Insurance Center (MRIC) at the Ludwig-Maximilian University in Munich, Germany, and organised by Andreas Richter and Jörg Schiller. It will be held in cooperation with the Center for the Economic Analysis of Risk (CEAR) at Georgia State University. According the preliminary schedule, giving plenary talks will be given by Professors Olivia Mitchell (University of Pennsylvania) and Eric Johnson (Columbia University).

The MRIC will cover two nights of accommodation for participants presenting papers or acting as discussants.

Submission instructions: Please submit proposals electronically to richter@lmu.de as a file attachment in pdf or MSWord format by **31 July 2014**. Authors of accepted papers will be notified by 15 September 2014 and completed papers will be due by 31 October 2014.

Scientific review committee: Glenn Harrison (Georgia State University), Martin Kocher (Ludwig-Maximilian University, Munich), Alexander Mürmann (Vienna University of Economics and Business), Charles Noussair (Tilburg University), Andreas Richter (Ludwig-Maximilians University, Munich), Jörg Schiller (University of Hohenheim), Harris Schlesinger,(University of Alabama).

Call for Papers

Journal of Insurance Issues Research Awards on Insurance Regulation

The *Journal of Insurance Issues (JII)*, together with St. John's University's School of Risk Management, Insurance, and Actuarial Science (SRM), announces research awards totalling $5,000 for selected papers submitted for publication in a special issue of the *JII* focused on insurance regulation. Papers on all topics related to insurance regulation are invited for consideration. Papers previously published are not eligible for consideration.

A best paper award of $3,000 and two honourable mention awards of $1,000 will be made. Winning papers will be presented in a research symposium on 16 October 2014. The symposium will be held in conjunction with the School of Risk Management's annual conference on insurance regulation in New York City on 15 October 2014. Selected papers will be considered for inclusion in a special issue of the *JII* focused on insurance regulation to be published in March 2015. Travel support to attend the research symposium and the School of Risk Management's conference on insurance regulation will be provided for one author of each selected paper.

The deadline to submit manuscripts for consideration is **30 July 2014**. Awards will be announced 30 August.

Authors should submit papers to Jim Barrese at barresej@stjohns.edu with the subject "JII Research Award submission." The *JII* website (www.insuranceissues.org) contains information on paper formatting requirements.

The Awards Committee is composed of James Barrese (St. John's University), Thomas Berry-Stölzle (The University of Georgia), Mark Browne (St. John's University), Andre Liebenberg (University of Mississippi), Jean-Françoise Outreville (HEC Montréal), Andreas Richter (Ludwig Maximillian University) and Therese Vaughan (Drake University)

Call for Papers

Nonbank Financial Firms and Financial Stability Conference

6–7 November 2014, Atlanta

The Center for Financial Innovation and Stability (Federal Reserve Bank of Atlanta) and the Center for the Economic Analysis of Risk (Georgia State University), together with Department of Banking and Finance (University of Zurich) are organising the conference **"Nonbank Financial Firms and Financial Stability"**, to be held at the Federal Reserve Bank of Atlanta on **6 and 7 November 2014**.

Academics, professionals and regulators are invited to submit papers for this meeting. Long abstracts or, preferably, complete manuscripts may be submitted no later than the **15 August 2014**, on the full range of issues associated with nonbank financial firms and financial stability. These issues including but not limited to:

- What do we mean by financial instability or systemic risk?
- Can nonbank financial firms be an important cause of financial instability? Are they currently a risk?
- How should regulators identify nonbank firms that are threats to financial stability?
- How should the supervisors measure the riskiness of systemically important nonbank firms, either as a group or within individual sectors (such as insurance companies or hedge funds)?
- How should nonbank financial firms be supervised to reduce their threat to financial stability?

Please send your submissions in PDF format directly to Larry Wall, who may also be contacted for any further inquiries: larry.wall@atl.frb.org.

The selection committee consists of Glenn Harrison (Georgia State University and CEAR), Martin Grace (Georgia State University), Jean-Charles Rochet, (University of Zurich), Iftekhar Hasan (Fordham University) and Larry Wall (FRB Atlanta and CenFIS). The results of the selection process will be sent by the 15th of September 2014. Reasonable travel and accommodation expenses will be covered for the presenters of accepted papers.

Call for Papers

Western Risk and Insurance Association 2015 Annual Meeting

4–7 January 2015, Paradise Valley, Scottsdale, AZ

You are encouraged to submit a proposal to present research findings at the 2015 meeting of the Western Risk & Insurance Association (WRIA). Papers on any risk management or insurance related topic are welcome. WRIA meetings are known for their relaxed, friendly, and collegial atmosphere. This meeting should prove to be another enjoyable and educational event, and we hope to see you there!

Please submit a research proposal of no more than three pages, double-spaced, that describes your proposed presentation at the meeting. Any/all topics related to risk management, insurance, employee benefits, financial planning, estate planning, and other insurance-related topics will be considered. Your proposal must include the names and affiliations of all co-authors, with all phone, fax and e-mail addresses with designated contact, on a separate page.

Proposals from doctoral students are encouraged, and completed papers will be considered for the Dorfman Award. Please see http://www.wria.org/dorfman_scholarship.html for guidelines.

The deadline for all submissions is **1 October 2014**. This deadline will not be extended.

Decisions regarding presentation acceptance will be announced by 1 November 2014.

Proposals should be submitted electronically, as a Word or PDF attachment, and sent to: Dr. William Ferguson, University of Louisiana at Lafayette, WRIA Vice-President / Program Chair. Email: ferguson@louisiana.edu.

For more information about WRIA, please visit: www.wria.org

Call for Papers

Southern Risk and Insurance Association 2014 Annual Meeting

23–25 November 2014, Charleston, South Carolina

You are encouraged to submit a proposal to present research findings at the 2014 meeting of the Southern Risk & Insurance Association (SRIA). Papers on any risk or insurance related topic are welcome. Specific subject areas include, but are not limited to, insurance law or regulation, public policy, economics, finance, health care, international issues, employee benefits, or risk management.

Please submit an executive summary (not exceeding three pages) that describes the purpose, expected results, and importance of the research (completed, full papers may also be submitted). The names and affiliations of all co-authors, with telephone and fax numbers and e-mail address (if available) of the designated contact person, should be provided on a separate cover page attached to the proposal.

Proposals/papers from doctoral students are encouraged. Additionally, doctoral students that have papers accepted for presentation at the meeting will be invited to submit a full paper for the "Best Paper Award."

The deadline for submission is **2 August 2014**.

Proposals may be submitted via regular mail, fax, or e-mail. However, electronic proposals are preferred and should be submitted as a Word or PDF attachment to: David Eckles, SRIA Program Chair, Department of Insurance, Legal Studies and Real Estate, Terry College of Business, University of Georgia, 206 Brooks Hall, Athens, GA 30602, Email: deckles@uga.edu

For more information about SRIA, please visit: www.southernrisk.org

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Call for Papers

6th Workshop on Risk Management and Insurance (RISK2015)

26–29 May 2015, Barcelona, Spain

RISK is a regular biannual event that was originally launched in 2005 by the UB risk center— the University of Barcelona research group on Risk in Finance and Insurance. The sessions of RISK2015 will include the following topics: Credit, Market and Operational Risk Management and Measurement, Economic, Insurance and Financial Analysis for Insurance Companies, Financial and Banking Crisis, Regulatory Framework: Solvency II and Basel III, New Developments in Insurance Products, Statistical Methods for Insurance and Finance, Demography and Life Insurance, Economics of Insurance and Long Term Care.

This year workshop will be held jointly with the **2015 International Conference on Risk Analysis** (**ICRA6**)**,** is an international forum for disseminating recent advances in the field of Risk Analysis, with applications for the risk assessment and the risk management in Life, Biological and Environmental Sciences & Public Health, Economics and Finance, and Reliability of Engineering, Technical, Biological & Biomedical Systems.

The deadline for papers' submission is **20 November 2014**.

For further information about the workshop, please visit
http://www.uoc.edu/portal/en/symposia/icra6/Home/index.html

Recent Publications on Insurance

Handbook of Insurance (2nd ed.), edited by Georges Dionne, 2013

This new edition of the *Handbook of Insurance* reviews the last forty years of research developments in insurance and its related fields. It offers a single reference source for professors, researchers, graduate students, regulators, consultants, and practitioners.

Contents

- Insurance Market Regulation: Catastrophe Risk, Competition, and Systemic Risk, *by Robert W. Klein;*
- Insurance Markets in Developing Countries: Economic Importance and Retention Capacity, *by Jean-François Outreville;*
- Health Insurance in the United States, *by Michael A. Morrisey;*
- Longevity Risk and Hedging Solutions, *by Guy Coughlan, David Blake, Richard MacMinn, Andrew J.G. Cairns and Kevin Dowd;*
- Long-Term Care Insurance, *by Thomas Davidoff;*
- New Life Insurance Financial Products, *by Nadine Gatzert and Hato Schmeiser;*
- The Division of Labor between Private and Social Insurance, *by Peter Zweifel.*

For further information, please visit http://www.springer.com/economics/book/978-1-4614-0154-4

Enterprise Risk Management—Issues and Cases

By Jean-Paul Louisot and Christopher Ketcham
Published by Wiley, April 2014

Enterprise-wide risk management (ERM) is recognised as an important framework and tool for organisational leaders. By linking risk management directly to strategy, organisations are beginning to identify and treat risks that may not have been contemplated in traditional operational risk management processes. As implied by the ISO 31000 standard, the ERM process aims at optimising the impact of uncertainty on any organisation through a portfolio approach to both threats and opportunities.

In theory the concept of ERM is sound. However, many questions remain. How successful have other organisations been in their ERM implementation? What issues and problems are organisations facing in their ERM execution? How are others measuring the impact of ERM in their organisations given that there is not yet an agreed-upon measurement of what represents a successful ERM programme?

ERM – Enterprise Risk Management: Issues and Cases provides practical answers to these questions. This book contains interviews with senior risk management professionals from organisations that are in various stages of ERM implementation. It also includes case studies that provide the reader with insight on how to begin, maintain, and evaluate the effectiveness of an ERM programme. In addition to these case studies and interviews, the contributing authors provide suggested solutions to some of the problems that have vexed enterprise risk managers, including ethics, group dynamics, identifying and managing strategy, disturbances and business continuity, adequate and relevant data, risk to reputation, communication, and governance and compliance.

Written for the practicing risk professional and those who aspire to enter the risk profession, this book provides an extensive bibliography for further study as well as empirical evidence that can be used as a starting point for further research.

For further information, please visit http://eu.wiley.com/WileyCDA/WileyTitle/productCd-1118539524.html

A Firm Foundation: How Insurance Supports the Economy, 2014 national edition

By the Insurance Information Institute

The 98-page report provides detailed information on the wide variety of ways in which both property/casualty and life insurance companies contribute to the U.S. and state economies far beyond their core functions of helping to manage risk and paying claims. Dozens of charts and tables highlight the vital economic role played by insurers—from helping communities recover from major catastrophes to their roles as employers and major investors in municipal bond markets.

The PDF and website versions as well as individual state fact sheets are available at http://www2.iii.org/firm-foundation

Publications of The Geneva Association

Announcement

Past issues of *The Geneva Papers on Risk and Insurance—Issues and Practice* (GPP) and of *The Geneva Risk and Insurance Review* (GRIR) are available for free on The Geneva Association's website three years after their date of publication: https://www.genevaassociation.org/publications. Vol. 36(1) January 2011 of GPP and Vol. 35(2) December 2010 of GRIR have now been made available online.

Latest Issues

The Geneva Risk and Insurance Review

Vol. 39, No. 1 / March 2014

- Editor's Note, *by Michael Hoy and Achim Wambach;*

EGRIE KEYNOTE ADDRESS

- The Effect of Uncertainty on Optimal Control Models in the Neighbourhood of a Steady State, *by Miles S Kimball;*

ARTICLES

- Increase in Risk and its Effects on Welfare and Optimal Policies in a Dynamic Setting: The Case of Global Pollution, *by Quentin Grafton, Tom Kompas and Ngo Van Long;*
- Regret and Regulation, *by Rachel J. Huang, Alexander Muermann and Larry Y. Tzeng;*
- Multidimensional Screening in a Monopolistic Insurance Market, *by Pau Olivella and Fred Schroyen.*

The Geneva Papers on Risk and Insurance—Issues and Practice

Vol. 39, No. 3 / July 2014

- Solvency II: A Driver for Mergers and Acquisitions? *by Rayna Stoyanova and Helmut Gründl;*
- Systemic Risk in the Insurance Sector: A Review of Current Assessment Approaches, *by Andreas A. Jobst;*
- Determinants of Insurance Industry Development in Transition Economies: Empirical Analysis of Visegrad Group Data, *by Zuzana Brokešová, Erika Pastoráková and Tomáš Ondruška;*
- Sales Efficiency in Life Insurance: The Drivers for Growth in the German Market, *by Jonas Lorson and Joël Wagner.*

SPECIAL ISSUE ON INSURANCE LAW AND ECONOMICS
Guest Editors: Michael Faure and Miquel Martín-Casals

- Guest Editorial, *by Michael Faure and Miquel Martín-Casals;*
- Efficient Court Decisions and Limiting Insurers' Right of Recourse: The Case of Custodian Liability in the Netherlands and Belgium, *by Jef De Mot and Louis Visscher;*
- The Italian Motor Insurance Market: Will the Recent Interventions Solve the Old Efficiency Problems?, *by Donatella Porrini;*
- Special Insurance Systems for Motor Vehicle Liability, *by Jef De Mot and Michael G. Faure;*
- Limiting Auditors' Liability: The Case for (and Against) EU Intervention, *by Niels J. Philipsen.*

THE RESEARCH PROGRAMME ON RISK AND INSURANCE ECONOMICS

The research programme on Risk and Insurance Economics comprises the theoretical and academic activities of The Geneva Association.

It is dedicated to making an original contribution to the progress of insurance by promoting studies of the interdependence between economics and insurance and to highlighting the importance of risk and insurance economics as part of the modern general economic theory. The objectives of the Programme are to detect and define special aims for research programmes in risk and insurance economics, to stimulate and support academic and professional research work in risk and insurance economics, and to diffuse knowledge and the results of research in risk and insurance economics worldwide.

The Geneva Association

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

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

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

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

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FORTHCOMING CONFERENCES OF THE GENEVA ASSOCIATION

2014

September

15–17	St. Gallen	**41st Seminar of the European Group of Risk and Insurance Economists (EGRIE)**, sponsored by The Geneva Association
22	Munich	**International Colloquium on Global Capital Standards (BCR, HLA, ICS)**, hosted by Munich Re

October

23–24	New York	**6th CR+I Seminar on "Extreme climate and weather events in the USA and globally"**, organised in collaboration with XL Group

November

4	London	**10th International Insurance and Finance Seminar of The Geneva Association**, hosted by Prudential plc
6–7	Madrid	**11th Health and Ageing Conference on "Emerging health risks and insurance"**, hosted by MAPFRE Foundation
18–19	Munich	**10th CRO Assembly**, hosted by Munich Re

2015

May

13–16	Singapore	**42nd General Assembly of The Geneva Association**, hosted by the Monetary Authority of Singapore (Members only)

August

2–6	Munich	**3rd World Risk and Insurance Economics Congress (WRIEC)**, organised by EGRIE in cooperation with APRIA, ARIA and The Geneva Association

2016

June

8–11	Rome	**43rd General Assembly of The Geneva Association**, hosted by the Italian Members (Members only)