Editorial

The Geneva Papers, 40 Years at the Cutting Edge of Research in Insurance Economics

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The Geneva Papers on Risk and Insurance is celebrating its fortieth birthday this year. In January 1976, Raymond Barre, the first president of The Geneva Association, and Orio Giarini, its first Secretary General, founded The Geneva Papers on Risk and Insurance with the main goal of supporting and encouraging research in the economics of risk and insurance.

At that time, research in the field of insurance was still embryonic. Insurance was regarded as a peripheral social activity and its economic value received only very little attention. With the beginning of steady economic growth, the function of insurance gradually emerged as a key contributor to economic development. By integrating uncertainty into economic theory and benefiting from the progress of both financial economics and decision theory, research developed further in the field of insurance economics and risk management and is now prolific. We dare to believe that The Geneva Papers on Risk and Insurance contributed to this evolution and that its impact on research in insurance has largely exceeded what its two founding members could have expected\textsuperscript{1}.

Looking back at past issues published in The Geneva Papers on Risk and Insurance, it is really astonishing to witness the great number of scholars in the field who contributed to the journal. They include the pioneers of the discipline as well as Nobel Prizes and highly recognised and reputed scholars, but also high-level experts and executives from the insurance industry, making the journal a unique forum to stimulate constructive dialogue between the industry and its economic and social partners.

One activity to celebrate this fortieth anniversary is to issue a special anniversary collection of The Geneva Papers on Risk and Insurance gathering articles published in the last years that echo the diversity of themes addressed in the journal. Of course, this collection deals with just a few of these many themes. Most of these articles were published during the five last years. However, we also decided to shed light on some articles that were published earlier and which encountered a huge success in the literature. We have voluntary selected this set of papers on the grounds that they address themes of high interest both for the insurance industry and academia, ranging from the impact of asymmetric information on insurance market efficiency, the issue of systemic risk in insurance, the social function of insurance, the market for catastrophe bonds, the effect of climate risks on insurance, insurers’ investment in infrastructure, price differentiation in insurance, microinsurance, insurance regulation, and the income elasticity of insurance demand. The papers are presented by reversed chronological order based on their date of publication.

The paper by Peter Carayannopoulos and Fabricio Perez investigates whether catastrophe bonds (cat bonds) are zero-beta investments, i.e. whether they are a valuable new source of diversification for investors. The authors study these questions by analysing the dynamic relations of cat bond returns and the returns of the stock, corporate bond and government bond markets. Their results provide evidence that cat bonds are zero-beta assets only in non-crisis periods. They document that cat bonds were not immune to the effects of the recent subprime financial crisis. However, the relatively small effect of the crisis on cat bonds compared with other asset classes make them a valuable source of diversification for investors.

\textsuperscript{1} In 1990, with the development of more theoretical studies on risk and insurance, The Geneva Papers were split into two publications. The Geneva Papers on Risk and Insurance – Issues and Practice which is more practice oriented as indicated in its name, and the Geneva Papers on Risk and Insurance Theory, renamed in 2005 The Geneva Risk and Insurance Review. Therefore both journals are celebrating their fortieth birthday this year.
The paper, by Mark Browne and Tian Zhou-Richter, investigates whether information known to the buyer of insurance but not to the insurer, that is, private information, results in adverse selection or advantageous selection in the German private LTC insurance market. Their analysis reveals sources of both adverse and advantageous selection in the German private LTC insurance market, and that the sources of adverse selection have a dominant impact over those of advantageous selection. These results give support to the conventional claim that asymmetric information distorts market efficiency and results in a lack of insurance demand, at least in the German private LTC insurance market.

The paper by Andreas Jobst reviews the recent regulatory efforts in defining systemic risk in the insurance sector and the designation of systemically important insurers. Although current evidence suggests that core insurance activities are unlikely to cause or propagate systemic risk, the characteristics and business models of insurance firms vary by country and might require a more nuanced examination, with a particular focus on non-traditional and/or non-insurance activities.

The financial market environment poses serious challenges for insurance companies to provide stable returns on a long-term basis, as particular traditional asset classes are currently characterised by generally low interest rates and high volatility. Against this background, the aim of the paper by Nadine Gatzert and Thomas Kosub is to study infrastructure investments from an insurer’s perspective. In particular, based on a categorisation of different types of infrastructure investments, it provides an overview of main characteristics along with risks and chances. In addition, the treatment of different infrastructure investments under Solvency II regulations is studied, which can have a considerable impact on an insurer’s asset management decisions. The study shows that the attractiveness of infrastructure investments strongly depends on the type of investment and its treatment under Solvency II and that considerable risks can be involved.

The paper by Hato Schmeiser, Tina Störmer and Joël Wagner investigates the 2011 European Court of Justice ruling to ban gender-specific premium differentiation. It discusses the relevance of price differentiation criteria from the point of view of insurers, regulators and ethicists, and reflects on the degree of acceptance of such price differentiation by consumers, which is assessed empirically through an international consumer survey conducted in the United Kingdom, Germany, France, Italy and Switzerland. The perception of risk factors and of effective gender-related price differences is considered with respect to motor, annuity, term life and health insurance. Finally, possible consequences of the new regulation for the insurance industry are discussed.

The paper by Christian Biener and Martin Eling provides a comprehensive analysis of the insurability of risks in microinsurance markets. The aim is to enhance the understanding of impediments to and facilitators of microinsurance from an economic perspective and outline potential solutions. The paper reviews 131 papers and finds that the most severe problems stem from insufficient resources for risk evaluation, small size of insurance groups, information asymmetries and the size of the insurance premium. On the basis of the analysis, it discusses a number of potential solutions such as, for example, a cooperative microinsurance architecture.

The paper by Simon Ashby investigates the causes of the 2008 banking crisis and the resulting lessons that need to be learned for insurance regulation. The paper argues that the banking crisis was predominantly caused by weaknesses in the management and regulation of banks, weaknesses that lead to problems such as flawed compensation schemes, poor risk management communication and an over-reliance on mathematical risk models. On the basis of these findings, doubts are expressed about the direction of certain insurance regulatory reforms—such as the focus on capital requirements and quantitative risk assessment (the so-called “Pillar I” of most reforms). It is also recommended that a more balanced approach to insurance regulation should be implemented that places much greater emphasis on enhancing risk management guidance and supervisory tools (Pillar II) and improving disclosure rules (Pillar III).

The paper by Celine Herweijer, Nicola Ranger and Robert Ward explores why adaptation to climate change is such a critical issue to the commercial success of the private insurance industry. It highlights both the risks arising from inadequate adaptation to the impacts of climate change, and the opportunities presented by playing a role in the global response to adaptation. The authors demonstrate that the success, or not, of adaptation to the impacts of climate change will be relevant to both the underwriting and investment operations of (re)insurance companies.
Furthermore, they demonstrate that activities that incentivise and enable adaptation not only give rise to commercial opportunities and reputational reward, but are increasingly necessary for the sustainability of the industry.

Models that assume a constant income elasticity of demand for insurance have the unrealistic implication that insurance penetration grows without constraint. The paper by Rudolf Enz introduces a logistic function that allows income elasticity to vary as the economy matures. Econometric estimations yield a so-called S-curve, for which the income elasticity of demand is equal to one at specific low and high levels of income, but may reach two or more at intermediate income levels. Long-term forecasts for insurance premiums based on GDP projections are possible for countries that either conform to the S-curve model or deviate consistently from it. Analysing deviations from the S-curve allows the identification of outlier countries, in which factors other than GDP drive insurance demand.

The paper by Steven Shavell investigates what the economic theory of insurance and of liability law imply about the social desirability, or lack thereof, of liability insurance. It considers the standard model of accidents and determines there that liability insurance is socially desirable. The article also turns to the chief circumstance under which regulation of liability insurance coverage may be justified, i.e. when incentives to reduce risk are inadequate.

This collection of papers deals with just a few of the many themes addressed in the papers published by the journal since it was created. However, it illustrates the richness of topics the field of insurance deals with. It provides important insights on the numerous challenges insurance is confronted with and the helpfulness of research in finding solutions to these challenges. Quoting Raymond Barre in this journal about the celebration of the 25th birthday of The Geneva Association, “The Geneva Association will continue to demonstrate that insurance companies have a great deal to gain from the combination of rigorous economic analysis with inventive research at the service of innovation and progress”. My hope is that The Geneva Papers on Risk and Insurance will continue for many years to come to play its role of improving the scientific knowledge of the insurance industry as a highly esteemed journal among the academic community. Time will tell.