Contents

4 Editorial
5 The ICIR Year at a Glance
7 The ICIR at Goethe University
15 People at the ICIR
21 Research
Insurance. Risk. Regulation.
22 The Effects of a Low Interest Rate Environment on Life Insurers
25 The Effects of Contingent Convertible (CoCo) Bonds on Insurers’ Capital Requirements under Solvency II
27 Insurance in an Ageing Society
28 Household Liquidity Risk Management and Insurance Companies’ Investment Behavior
28 Legal Feasibility of Proposed Changes to the Regulation of Life Insurance Contracts
29 The Modern Tontine: An Innovative Instrument for Longevity Provision in an Ageing Society
30 Financial Challenges of an Ageing Society with a Special Emphasis on Insurance Solutions
31 Research Publications
33 Policy Platform
34 Solvency II at the Gates
37 Risk Disclosure by Occupational Pension Funds
39 Corporate Governance in Insurance Regulations
41 Life Insurance Product Development in Upheaval
43 Insurance: Globally under Pressure? (GIS Conference 2015)
47 Emerging Risks and Limits of Insurability (Karel’s Club)
49 Investment Strategies of Insurers and Long-Term Investment (OECD Project)
50 Presentations and Activities
53 Education
Studies. Lectures. Seminars.
54 Finance, Insurance Economics and Insurance Law
55 Bachelor Degree
56 Master Degree
56 Law Studies
57 Executive Education
59 Events Calendar
62 Imprint
Editorial

With gratitude and pride we can look back at another successful year of the ICIR, in which we have attained a stronger international visibility. This has been achieved both by our successful research projects and an enhanced international scope of the ICIR’s Advisory Board.

The "Ageing Society" and its consequences for the insurance industry and insurance regulation will be a major research topic of the ICIR in the years to come. This is why we chose "Ageing Society" as the main theme of this year’s annual report. Moreover, it will give you a colorful view of the manifold activities that were led by the ICIR’s goals: Producing internationally visible research, providing a platform for discussing topics of insurance regulation and supervision, and promoting education in insurance and insurance regulation topics.

Many thanks, too, to all our partners and institutions for the excellent cooperation during the past year: amongst others, our research center SAFE at Goethe University, EIOPA, the World Bank Group, and St. John’s University. Last, but not least, I thank all the ICIR team members for their great work during the past year.

Enjoy reading and we look forward to welcome you at the ICIR!

Yours sincerely,

Prof. Dr. Helmut Gründl, Managing Director of the ICIR
The Year at a Glance

December 4, 2014
Frankfurt, Germany
Goethe University
Inaugural Lecture “Better (Insurance) Regulation: In Search for the Holy Grail”
Prof. Karel Van Hulle

December 4 – 5, 2014
Paris, France
OECD Insurance and Private Pensions Committee Meeting
Presentation of Draft Report “Investment Strategies of Insurers and Long-Term Investments”

January 30, 2015
Frankfurt, Germany
House of Finance
“The European Regulation of Endowment Life Insurance and Occupational Pension Schemes: What’s next?”
Sven Giegold, Bündnis 90/Die Grünen

February 27, 2015
Frankfurt, Germany
EIOPA Roundtable on Investments in Infrastructure Projects
“The Market for Infrastructure Investments and the Role of Insurers”

March 18 – 19, 2015
Berlin, Germany
ICIR Research Presentation at 2015 Annual Meeting of the German Association for Insurance Science

April 21, 2015
Frankfurt, Germany
EIOPA Financial Stability Committee Stress Test Subgroup Meeting
“Updated Results on the Impact of the Interest Rate Environment on Insurance”

April 30, 2015
Philadelphia, USA
ICIR Research Presentation at the Pension Research Council and the Boettner Center for Pensions and Retirement Research at the Wharton School of Business Conference on “Implications of the New Regulatory Order for Retirement System Risk Management”

May 8, 2015
Philadelphia, USA
Temple University, Fox School of Business and Management Workshop on Systemic Risk and the Insurance Industry “Insurance Activities and Systemic Risk”

August 3 – 6, 2015
Ludwig-Maximilians-Universität, Munich
ICIR Research Presentation at The World Risk and Insurance Economics Congress (WRIEC)

August 6, 2015
Frankfurt, Germany
European Systemic Risk Board (ESRB) Seminar “European Insurance Companies: Low Interest Rates and Systemic Risk”

October 5, 2015
Frankfurt, Germany
EIOPA Advanced Seminar Quantitative Techniques in Financial Stability “Measuring and Ensuring Financial Stability in the Insurance Sector?”

September 8 – 9, 2015
Goethe University, Frankfurt, Germany
4th Conference on Global Insurance Supervision “Insurance: Globally under Pressure?”
The ICIR at
Goethe University
Goethe University’s Mission Statement*

Goethe University is a cosmopolitan workshop for the future in the heart of Europe. Established in 1914 by the city’s citizens for the city’s citizens, from 2008 onwards it has resurrected its tradition as an endowed university. Firmly aware of its checkered history, Goethe University is guided by the ideas that informed the European Enlightenment, by the concepts of democracy and the rule of law, and thus opposes racism, nationalism and anti-Semitism. Goethe University is a place for debate and interaction, with research and teaching always linked to a sense of social responsibility. The university associates innovative thinking and interdisciplinary practices with the name Johann Wolfgang Goethe – the renowned writer, thinker and student of nature.

Our principles include:

- We respond to issues in society today by drawing on diverse disciplines.
- We champion the freedom and unity of research and teaching.
- We conduct research, teaching and learning at an international level.
- We assess our own performance both constructively and critically.
- We see ourselves as a learning organization.
- We insist on transparent management structures and the inclusion of all groups.
- We live equal opportunities.

We always act and think in a spirit of openness and diversity. Accordingly, as a citizens’ university we welcome dialogue with all strata of society.

*This Statement reflects the proposed changes put forward by the university-wide forum on June 4, 2014, the responses to the university-wide communication dated June 30, 2014, and the changes made by the Senate on October 8, 2014.
Research
The International Center for Insurance Regulation (ICIR) is recognized as a leading scientific institution fostering independent research on insurance regulation and market solutions to regulatory questions. As an integral part of Goethe University in Frankfurt, the ICIR is committed to Goethe University’s values and mission statement.

Policy Platform
The ICIR provides an international and interdisciplinary platform for scholars, executives of the insurance industry, regulatory authorities, and policy makers to exchange ideas and shape strategic thinking about the future development of insurance and insurance regulation.

Education
The ICIR offers students, industry professionals and experts from the regulatory authorities high-quality (executive) education courses on insurance and regulatory topics.
Goethe University:
A Center for Insurance Studies
From the Fundamentals
to Policy Advising

Insurance studies are strongly represented at Goethe University. The reasons for this are partly historical and partly political: Frankfurt has been the seat of many large insurance companies for quite some time and with the establishment of the European Occupational and Pensions Authority (EIOPA) in Frankfurt, the city is now also the breeding ground for an important part of European insurance regulation and a regular meeting place for insurance regulators from Europe and from all parts of the world.

Are the insurance systems prepared for the increasing occurrence of natural disasters? How will life insurance survive the low-interest period? And what consequences
are to be drawn from the financial crisis? These are just some of the questions currently of concern to insurance researchers. This field has been securely anchored at Goethe University in Frankfurt since its establishment. Hardly surprising, since Frankfurt has been the seat of many large insurance companies since the beginning of the 20th century: Deutscher Phönix, Providentia and Frankfurter Allgemeine Versicherungs-AG – to name but a few. The spectacular collapse of the Frankfurter Allgemeine Versicherungs-AG in 1929 contributed – albeit involuntarily – to a further development of insurance supervision law.

**An Important Insurance Industry Location**

Today, Frankfurt, in connection with Wiesbaden, is the fourth largest insurance industry location in Germany, with the metropolis on the banks of the Main River housing the highest number of foreign insurance companies of any German city. Since 2011, Frankfurt is also the seat of the European Insurance and Occupational Pensions Authority (EIOPA), and thus the European center of insurance regulation. The significance of insurance studies at Goethe University has continued to increase over the last few decades. In addition to teaching and research in all areas of insurance business practice and insurance law, there are also activities concerning insurance mathematics, insurance informatics and insurance medicine.

Goethe University is home to renowned institutes, residing primarily in the House of Finance: the interdisciplinary International Center for Insurance Regulation (ICIR), the Institut für Versicherungsrecht (IversR), the Institut für europäische Gesundheitspolitik und Sozialrecht (ineges). Soon after their establishment, these institutes developed into a platform for decision-makers from the fields of politics, regulation, associations and business. The Advisory Board of the ICIR, along with scholars and insurance business practitioners with close ties to the academic world, has as its members the Chairman of EIOPA, Gabriel Bernardino, and the BaFin President Felix Hufeld.

**Internationalization**

“We are very close here to the topics of current importance” says Prof. Manfred Wandt, Director of the IversR and Member of the Executive Board of the ICIR. This also includes the internationalization of the insurance world. “The financial crisis of 2008 showed that something must be done urgently in terms of regulation and supervision”, Wandt continues. The entire field of regulation law has thus been placed under review, with stricter rules to be enforced in the future concerning capital endowment, company direction and reporting requirements to the public and regulation authorities. “The key goal is essentially to prevent the insolvency of companies, since the long-term nature of financial investment plays an even greater role for consumers in the case of insurers than in the case of banks.” For Wandt, it is important to show students of law the significance of his “somewhat exotic” subject. “The topic of insurance is initially not sexy. We tend to ignore the risks with which we live, and then the whole thing becomes difficult to understand”, Wandt explains. Practitioners have often served to open the eyes of students: those who have dealt with questions of insurance law surrounding 9/11 or with the significance of insurance for the functioning of industry tend to gain new perspectives, and the demand for the insurance law courses is indeed increasing. Insurance law and insurance economics also have a permanent place in the curriculum of the LL.M. Finance study program at the Institute for Law and Finance (ILF).

Academically oriented, experienced practitioners enrich the teaching program on offer, with the Hessian State Appointee for the Insurance Industry – Wolfgang Wrabetz –
Insurance is not a typical consumer product. In contrast to material goods, which the customer can view and try out before buying, insurance products are defined only by the insurance contract and the accompanying laws. The legal regulations intended to protect the insurance customer, however, differ from state to state, which makes it extremely difficult to establish a common domestic market in this field. A group of experts working on behalf of the EU Commission came to the conclusion that this situation must be improved. The key statement of the concluding report was that Europe needs a unified European insurance contract law as a legislative option. A partial harmonization through guidelines is not sufficient. The commission of experts was formed on the basis of model legislation drafted by the Restatement Group of European Insurance Contract Law. The Frankfurt insurance law expert Manfred Wandt was a founding member of this European research group.

The ICIR is involved in the research center “Sustainable Architecture for Finance in Europe” (SAFE). at Goethe University, is cultivated through lecture series and conferences, and is documented in a series of academic papers. The ICIR accompanies this dialogue with regular policy letters concerning current topics of legal policy pertaining to insurance regulation. In cooperation with the German Society for Insurance Studies (Deutscher Verein für Versicherungswissenschaft) and the Department of Legal Studies at the University of Mainz, annual conferences have been held since 2009 on the reform of the European insurance regulation law through the Solvency II project.

Policy advising on the part of individual scholars is also a high priority, with Prof. Astrid Wallrabenstein being a member of the Social Council which advises the federal government, Prof. Manfred Wandt (ICIR/IversR) sitting on the Insurance Advisory Council of BaFin, and Prof. Karel van Hulle (ICIR) being a member of the Insurance & Reinsurance Stakeholder Group (IRSG) of EIOPA, along with Prof. Helmut Gründl, Dr. Ming Dong (ICIR) and Junior Professor Jens Gal (ICIR/IversR) currently advising the OECD regarding long-term investment strategies of insurers.

and the former Director of the Unit for Insurance and Pensions of the European Commission – Karel Van Hulle – also belonging to the Executive Board of the ICIR, in addition to their role as honorary professors. The ICIR is also involved in the LOEWE research center “Sustainable Architecture for Finance in Europe” (SAFE), a cooperation between the Center for Financial Studies and Goethe University.

The dialogue with insurance practice, with financial support from a foundation for the teaching of insurance at Goethe University, is cultivated through lecture series and conferences, and is documented in a series of academic papers. The ICIR accompanies this dialogue with regular policy letters concerning current topics of legal policy pertaining to insurance regulation. In cooperation with the German Society for Insurance Studies (Deutscher Verein für Versicherungswissenschaft) and the Department of Legal Studies at the University of Mainz, annual conferences have been held since 2009 on the reform of the European insurance regulation law through the Solvency II project.
We would like to express our gratitude towards our funding partners, the university, cooperation partners, and all the people within our network, for their continuous trust and tremendous support shaping the ICIR’s development.

The ICIR receives generous funding by the State of Hesse (Land Hessen) and the German Insurance Association (Gesamtverband der Deutschen Versicherungswirtschaft (GDV)) for a period of ten years.

Goethe University, a research-oriented university at the heart of Europe’s financial center Frankfurt am Main, provides an outstanding and modern infrastructure located on the Campus Westend in the House of Finance.

Goethe University gives the ICIR a unique scientific environment for interdisciplinary research, especially through its research center “Sustainable Architecture for Finance in Europe” (SAFE).

In addition, the ICIR receives further research funding from the German Association for Insurance Studies (Deutscher Verein für Versicherungs-wissenschaft e.V.) in Berlin, the Frankfurt Association for the Promotion of Insurance Studies at Goethe University (Förderkreis für die Versicherungslehre an der Johann Wolfgang Goethe-Universität) and Goethe Finance Association e.V. (GFA).
People at the ICIR
The Executive Board

Prof. Dr. Helmut Gründl
Professor
Chair for Insurance and Regulation
Goethe University
Managing Director
International Center for Insurance Regulation (ICIR)

Prof. Dr. Karel Van Hulle
Honorary Professor
Goethe University
Associate Professor
KU Leuven
Chairman
Insurance & Reinsurance Stakeholder Group (IRSG) of EIOPA
Member
Public Interest Oversight Board (PIOB)

Prof. Dr. Manfred Wandt
Professor
Chair of Civil Law, Commercial and Insurance Law, Private International Law, and Comparative Law
Goethe University
Managing Director
Institute for Insurance Law
Founding Director
International Center for Insurance Regulation (ICIR)

Prof. Dr. Wolfram Wrabetz
Honorary Professor
Goethe University
Representative of the Federal State of Hesse for the Insurance Sector
Founding Director
International Center for Insurance Regulation (ICIR)
The Advisory Board

Gabriel Bernardino
Chairperson, EIOPA, Frankfurt am Main

Alberto Corinti
Member of the Board of Directors of IVASS – Istituto per la Vigilanza sulle Assicurazioni, Rome

Dr. Jörg Freiherr Frank von Fürstenwerth
Chairman of the Executive Board, Gesamtverband der Deutschen Versicherungswirtschaft e. V. (German Insurance Association), Berlin

Felix Hufeld
President of the Federal Financial Supervisory Authority, Bonn

Dr. Monica Mächler
Member of the Supervisory Board of Directors of Deutsche Börse AG and of Zurich Insurance Group Ltd., Zurich

Prof. Dr. Hartmut Nickel-Waninger
Member of the Management Board of the Gothaer Group, Cologne

Dr. Norbert Rollinger
CEO, R+V Allgemeine Versicherung AG, Wiesbaden

Dr. Petra Roth
Former Lord Mayor of Frankfurt am Main

Prof. Dr. Heinrich Schradin
Director of the Seminar for Business Administration, Financial Economics, Risk Management and Insurance, University of Cologne, Köln

Raj Singh
Group Executive and Chief Risk Officer at Standard Life plc., Edinburgh
The ICIR Team

Prof. Dr. Helmut Gründl
Managing Director

Jun. Prof. Dr. Jens Gal
Jun. Prof. for European Insurance Law

Jozefina Kontic
Associate Managing Director

Petra Petersen
Administrative Assistant

Elia Berdin
Research Assistant and Doctoral Student

Irina Gemmo
Research Assistant and Doctoral Student

Christian Kubitza
Research Assistant and Doctoral Student

Jan-Hendrik Weinert
Research Assistant and Doctoral Student

Lorenz Ebermann
Student Assistant

Martina Gavran
Student Assistant

Hendrik Schlüter
Student Assistant
Dr. Ming Dong
Research Assistant and Doctoral Student 2011 – 2015
Regulatory Advisor
Deutsche Asset & Wealth Management

I started my PhD study at Goethe University Frankfurt in 2011, which was one of the greatest decisions that I have ever made. Goethe University Frankfurt is a place which integrates modern concepts and international perspectives into the traditional educational system, and I have benefited a lot from its diversity and openness. During my study, I also worked as a Research Assistant at the International Center for Insurance Regulation (ICIR). The ICIR is an independent academic organization that provides high-quality research work, (executive) education, and platforms for stimulating dialogues between regulators, industrial specialists and researchers. As a team member, I had the great opportunity to access the top-level think tank, to collaborate on interesting research projects, and to exchange my work and thinking with the rest of the world. Prof. Dr. Helmut Gründl, Managing Director of the ICIR, has been one of the brightest and most benevolent people that I have ever met. Working for him enabled me to obtain broad knowledge in the area of insurance regulation, to seek understandings about myself, and to learn how to make right decisions in the future. I have gained a lot more than I could ever think of before I started, which makes the last four years a precious journey in my life. ◆

Tobias Niedrig
Research Assistant and Doctoral Student 2012 – 2015
Executive Board Assistant
Allianz Deutschland AG

I started my dissertation at the International Center for Insurance Regulation (ICIR) in November 2012 following my master’s degree. Personally, I find the ICIR a great place to pursue a PhD degree as high-level research plays a pivotal role at the center. There is a great scientific spirit among all the researchers with regular interactions and research meetings. The many partnerships with national and international universities offer a great way to present and discuss latest research topics with leading scientists in the field of insurance economics and regulation. In addition to the scientific work, teaching has been a great experience for me. The exchange with young students is interesting and a great way to grow both on a personal and professional level. Through frequent events such as conferences, workshops and seminars, the ICIR offers many opportunities to engage with high-level decision makers from both regulators and the industry to discuss about the latest political and scientific developments. This provides the unique opportunity to build an international network in the insurance industry. In summary, the center is a great place to start an international career in the field of insurance. I would like to thank the ICIR Team for their support, guidance and motivation. ◆
Research
Insurance. Risk. Regulation.
The current loose monetary policy pursued by many central banks around the world is resulting in extraordinarily low interest rates that are becoming a threat to the stability of the life insurance industry. This is especially the case in countries such as Germany, where products sold in the past with relatively high guaranteed returns still represent a significant share of the total portfolio.

Life insurers typically invest a large part of their portfolios in sovereign bonds. Therefore, the present low interest rates directly affect the rate of return of their portfolios. Moreover, typical life insurance products offered in Europe are sold with a long-term minimum return guarantee, which is set at the inception of the contract and remains unchanged until the contract ends. Life and annuity contracts usually have maturities of 20 to 30 years, meaning that life insurers still hold contracts in their underwriting portfolios that were sold in times when investment guarantees were significantly higher owing to higher bond yields. In addition, the duration of a life insurer’s liabilities is typically higher than the duration of its assets. Therefore, under a market consistent valuation of assets and liabilities, i.e. under the forthcoming Solvency II regulation, the current low interest rates increase current liability values more than asset values. This, in turn, reduces the market value of equity capital, thus having a detrimental effect on insurance companies’ solvency situation.

The Case of the German Life Insurance Industry

In our paper we aim to assess the solvency situation of a typical German life insurer under the incoming Solvency II regulation, i.e. a mark-to-market regulatory regime. Our work also allows us to assess the impact of the newly introduced reform of German life insurance regulation (i.e. the "Lebensversicherungsreformgesetz")
on insurers’ default probabilities. To do so, we generate a stochastic term structure of interest rates and stock market returns to simulate the investment returns of a stylized life insurance business portfolio in a multi-period setting. Based on empirically calibrated parameters, we can observe the evolution of life insurers’ balance sheets over time, in particular their solvency situation. To account for different scenarios and to check the robustness of our findings, we calibrate different capital market settings and different initial situations of capital endowment. Our results suggest that a prolonged period of low interest rates would markedly affect the solvency situation of life insurers, leading to relatively high cumulative probabilities of default for less capitalized companies.

Low interest rates are becoming a threat to the stability of the life insurance industry.

Simulation of Different Market Developments
We project the insurers’ balance sheets 10 years into the future under different (stochastic) capital market settings and with different initial capital endowments. For this, we consider three calibrations for the...
The newly introduced reform of German life insurance regulation substantially improves the situation, especially for less capitalized companies, which would otherwise not be able to bear the losses stemming from their liabilities. Yet, this improvement comes at the expense of lower benefit payments to policyholders, who experience a reduction of the minimum profit participation and therefore a haircut on their claims.

In conclusion, our model is of special interest for three reasons: (i) it allows a realistic calibration of different market conditions and different regulatory features; (ii) it provides insights into the effects of monetary policies on financial institutions which give long-term financial promises, such as life insurers and pension funds; and (iii) it can serve as a tool in the newly introduced “Forward Looking Assessment of Own Risks” (FLAOR), which insurance companies will have to perform under Solvency II regulation.

Implications for the Solvency Situation of German Life Insurers

The results of our study suggest that: (i) should interest rates remain at the current level and gradually converge towards 1% (calibration 2), the solvency ratio of a large number of German life insurers would be considerably reduced, with a consequent increase in the probability of default starting as early as 2016; and (ii) a moderate rise in the interest rate level would considerably increase the solvency margin, and thereby reduce the probability of default.

Simulation of Capital Market Developments: Under calibration 1, interest rates with a maturity of 10 years gradually converge towards 2%; under calibration 2, towards 1%; and finally, under calibration 3, towards 3%. We assume five different initial capital endowments, each representing a quintile of the observed capital endowments among German life insurers at the end of 2012. Both the asset and the liability side are modeled by taking into account the time to maturity structure that is typical for the life insurance business: based on publicly available German data, we are able to reproduce a duration mismatch between assets and liabilities of 3.75 years, which is very close to what is being observed in the German life insurance industry. Moreover, we distinguish between the book value balance sheet subject to German GAAP and the market value balance sheet subject to Solvency II rules. The former is used as a basis for the profit participation mechanism typical for life insurance contracts, whereas the latter is used to determine the solvency position of the life insurer.

Policy Institutions
- EIOPA, Seminar on Quantitative Techniques in Financial Stability for Insurance, Frankfurt, Germany, 2015
- European Systemic Risk Board, Seminar on Insurance, Frankfurt, Germany, 2015
- EIOPA Financial Stability Committee, Stress Test Subgroup Meeting, Frankfurt, Germany, 2015
- Deutsche Bundesbank Lunch Seminar, Frankfurt, Germany, 2013

Academic Conferences and Workshops
- Annual Meeting of the German Association for Insurance Science, Berlin, Germany, 2013 – 2015
- Systemic Risk Workshop, Temple University, Philadelphia (PA), U.S.A., 2015
- 41st Seminar of the European Group of Risk and Insurance Economists, St. Gallen, Switzerland, 2014
- Annual Meeting of the Asia-Pacific Risk and Insurance Association, Moscow, Russia, 2014
- Doctoral Workshop Universität Erlangen-Nürnberg, Germany, 2013
- Center for Quantitative Risk Analysis CEQURA Conference, Munich, Germany, 2013

Published in
- SAFE Newsletter Q1/2015

Related Publication
The Effects of Contingent Convertible (CoCo) Bonds on Insurers’ Capital Requirements under Solvency II

The Liikanen Group proposes contingent convertible (CoCo) bonds as instruments to enhance financial stability in the banking industry. Especially life insurance companies could serve as CoCo bond holders. There is a rising awareness of these hybrid securities among life insurers, as they are increasingly looking for higher-yielding investments during the current low interest rate period. Our contribution provides an insight for life insurance companies to understand the effects of holding CoCo bonds as implied by the Solvency II standards that will come into power by 2016.

The Liikanen Group strongly recommends contingent convertible debt issuance by banks as a potential mechanism to reduce the risk shifting towards taxpayers created by governments’ safety nets. This form of long term debt, with a fixed coupon rate, automatically converts to equity when a bank approaches insolvency, i.e. when a predetermined trigger is met. Upon conversion, a bank immediately replenishes its equity capital base, while at the same time reducing its interest payment obligations.

To maximize the stabilizing effect on the financial system, CoCo bond holders may not hedge themselves in the banking sector and should not experience refinancing difficulties when suffering losses on their investments. Diversified financial institutions with long term maturities on their funding side and restrictive termination rights, such as life insurance companies, seem to fit this profile. In fact, life insurers are already the largest purchasers of bank bonds in Europe, owning around 11% of European bank debt.

CoCo Bonds under Solvency II

In a recent study, we calculate the effects of holding CoCo bonds on life insurers’ risk-based solvency capital requirements under the upcoming European Solvency II standards. We develop a stylized model with a direct financial connection between banking and insurance. The bank provides loans that are financed by equity.
capital, deposits and additional bank debt (either non-convertible or contingent convertible). The financial connection between banking and insurance stems from the insurer’s investment into the bank’s bonds.

We study a variety of CoCo bond designs and allow for partial conversion which has important implications for investors: as CoCos convert to equity, bond holders become shareholders and thus share any costs or benefits that accrue to shareholders from subsequent conversions. To assess the effect of the conversion on insurers’ capital requirements, besides using the Solvency II standard model, we develop an internal model that ex-ante anticipates possible future bank share holdings. From the resulting capital requirements for insurers, we study the sensitivity with respect to the CoCo bond design (trigger value, conversion ratio, holding time of bank shares) and the bank’s risk appetite.

Capital Requirements for Different CoCo Bond Types
We calculate the capital requirements for three contingent convertible bond types: write-down bonds (bond value is written down upon conversion rather than being converted to equity), contingent convertible bonds SAC (sold at conversion) and contingent convertible bonds HTM (held to maturity). As a benchmark, we use the treatment of non-convertible bank bonds.

Since the current standardized assessment of market risk depends on relatively crude risk weights, the Solvency II standard model is not able to reflect the entire risk profile of a CoCo bond. In contrast, an internal model can recognize the full risk return profile through dynamic modeling techniques and therefore evaluate the actual risk situation of the company. By varying the CoCo bond’s trigger value and the conversion ratio as well as the bank’s risk appetite, we find that the standard model can mislead CoCo investors and produce economically unsound incentives. For example, by increasing the trigger value, capital requirements under the Solvency II standard model wrongfully decrease, while they increase under the internal model. From the internal model, we learn that capital requirements for CoCo bonds increase with increasing trigger value, decreasing conversion ratio as well as increasing bank risk. In addition, CoCos lead to higher capital charges than nonconvertible bonds if bank risk is low, and to lower capital requirements if bank risk is high. For high bank risk, insurers clearly benefit from buying CoCos due to lower capital charges and a higher coupon rate. In this case, holding a CoCo clearly dominates holding a non-convertible bond.

Policy Implications
Our results show which design makes CoCo bonds an attractive investment category for life insurers. The current set-up and calibration of the Solvency II standard formula for market risk are inadequate with respect to the treatment of contingent convertible bonds. By highlighting these weaknesses of the market risk module, our results provide an indication for improving it.

Presentations and Publications of the Research Paper
“The Effects of Contingent Convertible (CoCo) Bonds on Insurers’ Capital Requirements Under Solvency II”

Published in
• SAFE Newsletter Q3/2015
• SAFE Policy Letter No 45

Academic Conferences and Workshops
• Annual Meeting of the German Association for Insurance Science, Berlin, Germany, 2015
• Southern Risk and Insurance Association (SRIA) Annual Meeting, Charleston, South Carolina, USA, 2014
• 18th International Congress on Insurance: Mathematics & Economics, Shanghai, China, 2014
Legal Feasibility of Proposed Changes to the Regulation of Life Insurance Contracts

Jens Gal has proposed a SAFE research project titled “Legal feasibility of proposed changes to the regulation of life insurance contracts” [to render them more liquid] which ties into the SAFE project proposal “Liquidity and longevity risk management of households and life insurance companies in an ageing society”. In the latter's other subprojects the advantages of certain regulatory changes will be examined in the realm of the developed theoretical model. Gal aims to analyze the legal feasibility of the proposed regulatory changes to life insurance contracts. The product design of insurance contracts must be in accordance with the objective of consumer protection and it is intended to bring to light regulatory constraints and the range of movement for developing more flexible life insurance products within some of the major insurance markets. In particular, the project’s aim will be to identify the common ground concerning surrender options and the legal intention behind setting a minimal surrender value.

Questions addressed will be:

- How does the demand for certain insurance products change as households become older?
- How does a change in the demand for insurance products change the investment behavior of insurance companies?
- What does the investment behavior of insurance companies affect household welfare?
- How should an optimal regulation of insurance products in light of an ageing society look like?
- What alternative investment opportunities (e.g., housing) might also serve to provide liquidity risk management?
The changing social, financial and regulatory frameworks, such as an increasingly ageing society, the current low interest rate environment, as well as the upcoming implementation of Solvency II, lead to the search for new product forms for private pension plans. These product forms should reduce or avoid investment guarantees and longevity risks, while still providing reliable insurance benefits and simultaneously taking into account for the increasing financial resources required very high ages.

In this context, we examine whether the historical concept of insurance, the "tontine", contains enough innovative potential to extend and improve the prevailing privately funded pension solutions in a modern way. The "tontine" basically generates an age-increasing cash flow, which is suitable for the increasing financial needs at higher ages.

Additionally, the "tontine" allows participation in stock market developments because the risk is borne by the insureds and guaranteed interest rates are not required. However, the "tontine" generates volatile cash flows, so that – especially in the context of an ageing society – the insurance character of the "tontine" cannot be guaranteed in every situation.

Our analysis can be seen in the current context of an ageing society and its growing need to maintain living standards at old ages. We aim to show that the "tontine" can serve as a reliable supplement to existing pension products of longevity insurance.
The Ageing Society is one of the major future societal challenges in Europe and worldwide. The demographic development highlights the need to reframe the way we think about ageing and how we anchor ageing into the economic agendas. Within this context, Finance will play a pivotal role as longevity and higher long-term care expenditures need coverage through adequate financing and insurance solutions. Paradigm shifts and innovations will be important to meet the future needs and embrace the chances of an ageing society.

The SAFE Policy center task force focuses on the financial challenges of an ageing society, looking at insurance solutions with a special emphasis. The approach will address the following areas and questions:

**Societal Characteristics of Today and 2050:** How will the societal characteristics of an ageing population be and what could future scenarios look like? How will the political, medical and technological developments be? How is the economic environment changing? How will the values, needs and expectations change?

**Financial Challenges and Responses of an Ageing Society**

Which financial challenges and chances will arise with increasing life expectation and inflation risk? What will the societal and financial needs of an ageing population be? Which role will insurance play in an ageing society? Will we need new insurance products, e.g. in the home assistance area, that reflect the needs of an ageing society? With PAYG pension systems increasingly under pressure the question arises, whether the present concepts of the second and third pillar of pension finance are sufficient? How can insurers deal with the political risks of a long period of low interest rates on the one hand, and inflation risk on the other hand?
Auswirkungen der anhaltenden Niedrigzinsen auf das Versicherungswesen

The Effects of a Low Interest Rate Environment on Life Insurers

The Effects of Contingent Convertible (CoCo) Bonds on Insurers’ Capital Requirements under Solvency II

Comments on the EU Commission’s Capital Markets Union Project
White Paper 27, SAFE Policy Center.

Is the Risk-Based Mechanism Always Better? The Risk-Shifting Behavior of Insurers under Different Insurance Guarantee Schemes

Optimal Asset Allocation for interconnected Life Insurers in the Low Interest Rate Environment under Solvency Regulation

Safety versus Affordability as Targets of Insurance Regulation: A Welfare Approach

Gal, J. (2014)
Rechtsschutz gegen Maßnahmen von EIOPA
in: Dreher, Meinrad/Wandt, Manfred (Hg.), Solvency II in der Rechtsanwendung 2014, Karlsruhe 2014, pp. 11–70.

Europäisierung und Transnationalisierung im Versicherungsrecht

Gal, J. (2014)
The German Insurance Ombudsman System
Solvency II at the Gates
Benefits and Risks of the New Insurance Regulation

Investors and insurance policy-holders are often confronted with complex products and providers’ opaque organisational structures. At the same time, the possibility that their claims will not be honoured often poses an existential risk. Financial regulation therefore aims to put in place a financial services framework that will safeguard market processes whilst also protecting consumers.

The issue of consumer protection is addressed not only by product regulation but also, in particular, by the fact that providers are able to deliver the promised benefits and services as a result of solvency regulation and market supervision. However, these benefits of regulation are accompanied by certain risks, which I have described below using the example of insurance regulation.
The deregulation of insurance markets and products in the mid-1990s intensified price competition among providers. It soon became apparent that – given the potentially greater insolvency risks involved – non-risk-based solvency regulation was unable to meet these challenges. Solvency II – which comprises risk-based solvency regulation – will come into effect throughout the European Union on 1 January 2016. These regulations stipulate that insurance companies must provide capital that is sufficient in to limit the likelihood of their insolvency to 0.5 per cent per year. Appropriate risk management structures and processes must be firmly embedded within the companies to guarantee the desired level of safety and reliability. And, last but not least, the obligation to submit comprehensive reports to both regulators and consumers is intended to create transparency about providers’ risk situations. These measures are good as far as they go. The problem is that implementing these three Solvency II objectives poses a number of risks that should not be underestimated.

Insurers Caught Between Hope and Fear
Even the timing of Solvency II’s introduction is problematic because the persistently low level of interest rates poses a significant challenge for many life insurers who are obliged to deliver previously guaranteed returns to their policyholders. The market-consistent Solvency II balance sheet – coupled with risk-based capital requirements – ruthlessly exposes this problem, unlike under the current regulatory system based on German accounting standards (HGB). The hope that interest rates will start to rise helps explain why the insurance industry did not mind that the introduction of Solvency II was postponed and lengthy transitional periods were agreed on. Insurers have also been insisting that insurance liabilities should not be subject to a strictly market-consistent valuation. This means that lower and less volatile values can be reported for these liabilities, which reduces the risk of institutions being forced into a fire sale of financial assets. The aforementioned measures will achieve their aim of temporarily averting a crisis. If interest rates remain low for much longer, however, these measures will merely conceal further emerging problems.

One regulatory risk that should not be underestimated is regulators’ fear of their own responsibility. This phenomenon, known as ‘regulatory forbearance’, appears to provide a compelling explanation for the fact that the introduction of Solvency II has been postponed several times and that the requirement for market-consistent valuations on the solvency balance sheet has been watered down. Regulators do not want to be seen as the ones responsible for any premature insolvencies if, for example, interest rates were to rebound swiftly from...
their current low levels and this triggered a general recovery. Regulatory capture and regulatory forbearance can therefore be mutually complementary.

The ‘Delegated Regulation’ dated 17 January 2015, which contains detailed rules and regulations on the introduction of Solvency II, runs to almost 800 pages. The highly complex and bureaucratic supervision and regulation revealed therein constitute a further serious risk. The tricky problem for entities being monitored is not just for them to ensure that they are complying with the rules. More importantly, there is a danger that firms might come to regard regulatory compliance as a mere box-ticking exercise and thus lose sight of the real objective of Solvency II, which is to instil in insurance companies a risk management culture that is based on a holistic view and, in particular, can identify any threats to their performance at an early stage.

Complexity is Becoming a Problem
However, the complexity of regulation poses the risk that supervisory authorities might not be up to the task of ensuring that regulatory requirements are being met. A case in point is the possibility for companies to use internal risk models to determine their capital requirements. Although these models are supposed to be more accurate than the standard formula, there is a risk that regulators are unable to assess the details of their composition and structure and how their parameters are determined. This, in turn, enables the regulated companies to exert improper influence on the presentation of their risk position, thereby increasing their business risk.

The complexity of regulation – coupled with the fact that different regulatory standards have been developed for banking and insurance – also provides opportunities for regulatory arbitrage, which enables companies to relocate their business to jurisdictions that have the weakest capital requirements or product regulation. Thus, regulatory arbitrage poses the risk that customers might purchase products that are less safe or reliable.

Risks arising from product regulation also play a part in the measurement of regulatory risk. The deregulation carried out in the mid-1990s often resulted in less transparent insurance products. The wide range of car insurance rates available is a case in point here. Regulators have sought to address this lack of transparency by imposing more stringent disclosure requirements on providers. A pertinent question, nonetheless, is whether the greater amount of paper that customers receive when taking out a policy necessarily means that they are also better informed. What is certain, however, is the higher cost, which is ultimately passed on to the customer. One thing definitely missing from the current political debate is a cost-benefit analysis of this aspect.

In conclusion, then, we can say that well-meaning financial regulation is certainly not the same thing as good regulation. The ongoing development of financial regulation should therefore factor in economic incentives and the resultant outcomes and risks to a greater extent than it has in the past. •

Regulators’ fear of their own responsibility is a risk that should not be underestimated.

Well-meaning regulation is not the same thing as good regulation.
Risk Disclosure by Occupational Pension Funds: Towards Fairness also for Members of Defined Benefit Schemes

Risk disclosure by insurance undertakings will improve dramatically as a result of the introduction of Solvency II. Although occupational pension funds are different from insurance undertakings, there is a need to improve risk disclosure also in this sector. This is not only important from a macro-prudential perspective but is also in the interest of members of pension funds, who have a right to know whether the pension promise made to them is at risk.

Improving the regulatory framework for occupational pension funds (Institutions for Occupational Retirement Provision – IORPs) in the EU has not been an easy task. The adoption of the IORP Directive in 2003 was a major achievement. It did, however, not succeed in...
opening up the internal market for occupational pension funds. The latest report by EIOPA on occupational pension funds and cross-border IORPs shows that there are still only 75 active cross-border arrangements, i.e. operations whereby a pension scheme in one member state is being managed by a pension fund in another member state. Neither did the Directive establish much clarity about the calculation of pension liabilities or about the risks incurred by pension funds and their members.

The European Commission’s proposal of 27 March 2014 amending the IORP Directive sets an important step towards improving the regulatory framework for pension funds based upon lessons learnt from Solvency II. It clarifies the cooperation between supervisory authorities, which should facilitate cross-border arrangements, it improves the governance of IORPs (introduction of key governance functions, similar to Solvency II), it clarifies risk management within IORPs (introduction of a Risk Evaluation for Pensions, similar to the Own Risk and Solvency Assessment under Solvency II) and it introduces new information requirements (Pension Benefit Statement). These changes are welcome. However, they fail to resolve the problems faced by members who are beneficiaries of defined benefit schemes. The Pension Benefit Statement is a useful addition for pension fund members who are the beneficiaries of defined contribution pension schemes and therefore bear the risk of their investment. Even after the amendment of the IORP Directive, members of defined benefit schemes will still not know whether the pension fund will be in a position to deliver. This is basically unfair. Depriving these members of information that might allow them to change their investment strategy when there is still time to do so is no longer in conformity with today’s principles of consumer protection.

Progress in risk disclosure by IORPs that would also provide valuable information for members of defined benefit pension schemes requires an agreement about how to calculate the pension liability. There is no valid reason to treat policyholders in life insurance undertakings differently from members of defined benefit pension schemes in this respect. It is therefore absolutely crucial that EIOPA continues its work on the holistic balance sheet and on solvency of IORPs. Calculation of pension liabilities must follow the same logic of market consistent valuation as established under Solvency II. This means that risk management within IORPs must also follow the same logic. Achieving this will ensure that all parties concerned will know well in time which measures will need to be taken in order to ensure that the pension promise will be more than just wishful thinking. This is what consumer protection is all about.
Corporate Governance in Insurance Regulations
With Goethe from Grey to Green to Gold?

On the occasion of the 8th Talk on Insurance and Regulation on May 19, 2015, Dr. Monica Mächler spoke on “Corporate Governance in Insurance Regulations – With Goethe from Grey to Green to Gold?”

Monica Mächler initiated her talk with an overview of the growing insurance regulations covering governance topics. The financial crisis of 2007/2008 led to increased attention to corporate governance by international standard setters and national regulators around the globe, often building on corporate law and stock exchange regulations. The Insurance Core Principles of the International Association of Insurance Supervisors and their subsequent ComFrame project for the supervision of Internationally Active Insurance Groups are standard-setting examples, whereas the governance requirements of the Solvency II Directive and the pronouncements based thereupon, the NAIC Governance Annual Disclosure Model Act and Regulation, the Canadian OSFI Corporate Governance Guideline, the Australian Prudential Standard CPS 510 Governance, the China Risk-Oriented Solvency...
System Conceptual Framework and the revised Swiss Insurance Supervisory Ordinance are examples of regional and national requirements. The variety of approaches chosen is wide, ranging from a reporting system to general guidelines, to a business process oriented-governance system and to a set of detailed governance requirements.

Given the limited available analysis relating to governance requirements in regulation, Monica Mächler proposed developing criteria in order to analyze and systematize the various examples of the requirements from technical, content-related and control-related perspectives. She then applied these criteria to a set of typical insurance governance requirements.

Principles of good governance include the clarification of purpose and proportionality of the norms. As result of such analysis Monica Mächler proposed the assessment of insurance regulatory governance requirements in a systematic manner with the so-called efficiency and effectiveness oriented principles of good governance. Such principles of good governance include the clarification of purpose and proportionality of the norms, the simultaneous consideration of insurance regulatory and other sources of applicable governance requirements and their interrelation, the responsible use of delegation of responsibilities and corresponding liabilities in companies, the application of the business judgement rule when assessing implementation with the benefit of hindsight, the consideration of the effects on individual legal entities and groups as well as taking into account general cornerstones of good governance. This multipronged approach allows testing and enhancing the efficiency and effectiveness of the individual insurance regulatory governance requirements.

Monica Mächler concluded by arguing that the insurance regulatory governance requirements should be the result of a conscious process of norm testing and policy setting as to techniques applied, contents regulated and controls available and an evenly conscious process of applying the principles of good governance on all the norms in scope. In this way, both the quality and the efficiency and effectiveness of the insurance governance norms can be enhanced. However, as with Goethe, better insurance governance regulation may turn a grey body of regulation to a set of green leaves, but to a golden tree? The best governance norms do not replace persons in charge acting with integrity, cognizant of their responsibilities and with the determination to reach good business decisions. ♦

About Dr. Monica Mächler
Member of the Supervisory Board of Directors of Deutsche Börse AG and Zurich Insurance Group Ltd, ICIR Advisory Board Member

Monica Mächler has been a member of the Supervisory Board of Directors of Deutsche Börse AG since May 2012 and of Zurich Insurance Group Ltd since April 2013. She regularly speaks, teaches and writes on financial market regulation and international law including the business impact thereof.

Mrs Mächler served as Vice Chair of the Board of Directors to the Integrated Swiss Financial Market Supervisory Authority (FINMA) from 2009 to September 2012, after having been the Director of the Swiss Federal Office of Private Insurance from 2007 to 2008. From 2010 to 2012 Monica Mächler chaired the Technical Committee of the International Association of Insurance Supervisors IAIS.

From 1999 to 2006 Monica Mächler assumed the role of Group General Counsel and Company Secretary of Zurich Insurance Group which she had joined in 1990. During the years 1985 to 1990 she was in private practice specializing in banking and international business law after earning her JD at the University of Zurich’s Law School and having been admitted to the Zurich Bar.
In the wake of the implementation of Solvency II, the European Life insurance industry is experiencing an ultralow interest rate environment, giving rise to public speculation about the future of life insurance. At the same time, the financial sector, including life insurance, is faced with a strong call for improved consumer protection on a national and European level. While there is little to no evidence for short-term failures of companies, the current development will have strong and lasting impact on the product portfolio of life insurance companies.

The talk of Dr. Neumann began with a glance back on the development of German life insurance in the past 4 decades. In this phase life insurance had to cope with fluctuations of 10 year interest rates in a range of 0.05% to 10% and multiple shocks of equity markets.
Legislation added a big deal of changes to the industry by deregulation of life insurance in 1994 and the abolishment of the tax benefits experienced for endowment contracts until 2004. According to Dr. Neumann, German life insurance has proven to be very resilient to such changes and prospered consistently. Product development acted quickly and adopted new business to the new legal and fiscal preconditions. Demographic trends of longevity, low birth rates and increasing personal wealth made life insurance premiums increase from 8 bn EUR in 1975 to 90 bn EUR in 2015. Yet the new business shifted from an almost “endowment only” market to a well diversified offering with the strongest position being in annuities.

The current situation again is characterized by multiple external influences that will have strong and lasting effects on life insurance industry. Dr. Neumann summarized these influences as follows: With Solvency II a new principle-based supervision regime comes in force. An increased focus on consumer protection and a strong call for transparency become apparent. Rapid digitization generates new customer journeys and has a strong influence on both sales and service requirements. Finally, capital markets are increasingly volatile and interconnected. Dr. Neumann underlined, that each aspect for its own asks for a fundamental redesign of products in life insurance.

In what followed, Dr. Neumann commented on Solvency II that represents once again a remarkable change for life insurers due to more complexity in the system and also more volatility in the risk metrics. According to Dr. Neumann, the impact of such volatility has yet to be observed and all market participants will have to get accustomed to it. For companies, risk reporting on the basis of daily market data on the one hand and long-term liabilities on the other hand request reduced sensitivities. Consequently, increased asset duration and new asset classes gain even more importance in the new Solvency II setting.

However, Dr. Neumann pointed out that life insurers had adapted their business models in the past successfully and that he expected the same to happen in future. Additionally, over the years life insurance products have proven to be more stable in providing customers with returns and financial security. Dr. Neumann concluded, that leveraging its core competencies, namely the management of long-term investments with guarantees and quantification of biometric risk, was one of the major tasks ahead for the industry and, as in the past, product innovation and financial strength were keys to succeed.

With respect to increased focus on consumer protection Dr. Neumann emphasized that looking forward, product development would have to concentrate even more on what people expect from life insurance. Efforts to invent both comprehensive and flexible products had to be intensified to put the customer at the center and to accommodate diverse needs. The core competencies of life insurance should merge into meaningful advice to customers seeking reliability in times of constantly increasing longevity. Regulators and legislators, too, would have to take part in the upcoming transformation process to safeguard life insurance as a means of providing reliable risk coverage and ensuring lifetime income. First, comprehensible information standards were needed. Second, it was crucial to provide regulatory guidelines when capital markets fail to deliver stable valuation of the risks involved. In doing so, legislators should allow for diversity as a unified approach could not be taking into account different requirements and history in different European markets.

Dr. Neumann closed his talk by emphasizing that life insurance was a fundamental choice taken once in a decade or even once in a life time. Thus, comprehensive advice to the customer and reliability were clearly at the core of the entire business and major strengths in a constantly changing environment.
4th Conference on Global Insurance Supervision
Insurance: Globally under Pressure?

The International Center for Insurance Regulation (ICIR), the European Insurance and Occupational Pensions Authority (EIOPA), the St. John's University Center to the Study of Insurance Regulation and the World Bank invited for this year's Conference on Global Insurance Supervision.

Top representatives from major (re)insurance groups, regulators and supervisors from around the globe and renowned academics gather each year in early September in Frankfurt to debate the "hot topics" of international insurance supervision, focusing on global trends in risk-based supervision and the upcoming challenges in the implementation of global standards.

This year's GIS conference organizers invited to discuss the regulatory aspects of achieving financial stability with a view to the insurance industry's resilience and the development of the international capital standard for insurance. In addition, a dedicated consumer session...
focused on the latest approaches to risk-based and proactive supervision of conduct risks in the insurance sector as well as on product governance and oversight.

Contents and Speakers

Insurance Supervision in a Global Macroeconomic Context:

Volker Wieland Endowed Chair for Monetary Economics at Goethe University Frankfurt and Member of the German Council of Economic Experts

W. Jean Kwon E.A.G. Manton Chair Professor and Director, the Center for the Study of Insurance Regulation (CSIR) of the School of Risk Management, St. John’s University, New York

Financial Stability – Recovery and Resolution: The Industry View

Christian Thimann Member of the Executive Committee, AXA Group

John H. Fitzpatrick Risk and Capital Committee Chair and Audit Committee Member, American International Group, Inc.


Gabriel Bernardino Chair of the European Insurance and Occupational Pensions Authority (Moderation)

Elke König Chair of the Single Resolution Board

Thomas Sullivan Associate Director, Federal Reserve Board

Patrick Montagner Chair of the FSB Cross-border Crisis Management Group for insurers
Break-Out Sessions:
From Regulation towards Supervision – How Will It Work in Practice?

Romain Paserot Director of Insurance Supervision ACPR, Paris

Jim Wrynn Managing Director, Vice-Chairman Strategic Advisory (US), Guy Carpenter & Company, LLC

Serap Gonulal Lead Insurance Specialist, Non-Bank Financial Institutions, Finance & Markets Global Practice, the World Bank Group

Daniela Weber-Rey Chief Governance Officer, Deutsche Bank AG

Valuation: “True and Fair View” under Pressure?

Helmut Gründl Managing Director, International Center for Insurance Regulation (ICIR), Goethe University, Frankfurt

Key Issues and Challenges for a Global Capital Standard

Masamichi Kono Vice Minister for International Affairs, Financial Services Agency, Japan (JFSA)

Panel Discussion: International Capital Standards – Are we there yet?

Moderation: Alison Harwood Global Practice Manager, Finance & Markets, World Bank

Nina Arquint Head Group Qualitative Risk Management, Swiss Reinsurance Company Ltd

Christina Urias Managing Director, International Insurance Regulatory Affairs, NAIC

Zhao Yulong Deputy Head, Finance & Accounting/Solvency Regulation Department, China Insurance Regulatory Commission

Panel Discussion: Consumer Protection: Risk-based & Proactive Approach for Conduct Risks in Insurance—Where are we heading to?

Moderation: Michael Consedine SVP and Executive Director of Government Affairs for Transamerica

Manuela Zweimueller Head of Regulations, EIOPA

Tetsuya Taniguchi General Manager, Government Relations Department, The Dai-ichi Life Insurance Company

Ole-Jørgen Karlsen Head of Section, Licensing and Crisis Management of the Banking and Insurance Department, Finanstilsynet

Mick McAteer Director, The Financial Inclusion Center ◆
4th Conference on Global Insurance Supervision
Goethe University, Campus Westend, Anbau Casino Saal West
Karel’s Club
Executive Insurance Forum
Emerging Risks and Limits of Insurability

According to Swiss Re, emerging risks are “newly developing or changing risks that are difficult to quantify and could have a major impact on society and industry”.

Hannover Re defines emerging risks as “new or future risks whose hazard potential is not yet reliably known and whose implications are difficult to assess”. Munich Re operates a risk radar, whilst Swiss Re has developed its SONAR (systematic observation of notions associated with risk).

The World Economic Forum looks at emerging risks as global risks and distinguishes between technological, crystalizing and aggravating risks. Technological risks are the result of technological change and innovation. Crystalizing risks are basically new risks that operate by and large outside the boundaries of current knowledge. Aggravating risks are known risks which are – because of their global dimension – difficult to measure. Emerging risks can have different origins: political decisions or events, operations of undertakings, socio-economic changes, financial developments, climatic changes, new technology, health related developments, regulation, casualty catastrophes (man-made disasters).
Although it is by definition impossible to list all emerging risks, the following survey produced by the World Economic Forum, which identifies a number of risk categories may be of interest: Economic, environmental, geopolitical, technological and societal.

The fourth meeting of Karel’s Club on 11 – 12 June 2015 addressed emerging risks and their insurability from different angles, benefiting from the input of a number of key experts in the field. The discussion focused on questions such as:

- How does prudential regulation deal with emerging risks?
- How should a risk-based solvency regime deal with emerging risks?
- Is the insurance industry ready to provide solutions for the insurance of emerging risks?
- How are emerging risks dealt with in financial statements?
- Are auditors looking systematically at emerging risks when they examine the financial statements of undertakings?
- Are (re) insurers underestimating the impact of emerging risks? How are emerging risks dealt with in internal models?
- How does a CRO of an insurance undertaking deal with emerging risks for the insurance undertaking?

Speakers
Manuela Zweimüller  
Director of Regulations, EIOPA

Christoph Willi, CEO  
Zurich Global Corporate Germany (Frankfurt)

Bernhard Kaufmann  
Group Chief Risk Officer, Munich Re (Munich)

Philip Vermeulen  
Senior Member European Actuarial Services Team, Ernst & Young (Zurich)

Romain Paserot  
Director of Insurance Supervision ACPR (Paris)

Raj Singh  
Group Chief Risk Officer, Standard Life plc (Edinburgh)

Marie-Gemma Dequae  
Scientific Adviser FERMA (Brussels)

Moderation  
Karel Van Hulle

About Karel’s Club
In cooperation with Goethe Business School (GBS)

Trialogue between
Insurance Executives, Regulators, Academia
Karel’s Club offers the opportunity to discuss new developments in insurance regulation as well as new trends in insurance in an informal setting, between senior management from the insurance industry, stimulated by reflections from academia and from representatives of the regulatory community. The objective is to enable thought provoking discussions on matters of concern to the participants under Chatham rules. The discussions should help to shape strategic thinking about the way in which insurance will likely develop in the coming years as well as on how regulation might influence this development. Proper attention is paid to the European and international regulatory agendas.

Target Group
This meeting is addressed to senior management from the insurance industry, i.e. board members, chief risk officers, chief financial officers, actuaries, accountants, regulators, supervisors and policymakers.

Chair
Chair Karel’s Club is chaired by Prof. Karel Van Hulle, Professor at the KU Leuven and at the Goethe University in Frankfurt, former Head of Insurance and Pensions at the European Commission and Executive Board Member of the International Center for Insurance Regulation (ICIR).
The potential role of insurers (particularly life insurers) and pension funds as long-term institutional investors, given the changing roles of the banking industry and capital markets, has become a central topic of discussion.

The recent global financial crisis, combined with regulatory changes in financial industries, has altered the financial landscape with regard to the investment allocations of institutional investors. Before the recent crisis, banks and capital markets were significant sources of project financing. However, the increase in the cost of interbank lending and the expectation of tighter regulations have constrained banks and equity markets in long-term financing. The potential role of insurers (especially life insurers) and pension funds as long-term institutional investors, given the changing roles of the banking industry and capital markets, has thus become a central topic of discussion. How this role develops will, in the long run, affect how firms, either inside or outside the financial sector, obtain financing for their investments and growth.

Insurance companies, on the one hand, could achieve investment income streams by financing long-term investments. In the current low interest rate environment, long-term investments can be beneficial for, inter alia, life insurers, particularly those that offered high-guarantee saving products in the past and thus need high yields to balance their liabilities. On the other hand, the current uncertain macroeconomic conditions and the expected changes in insurance regulation may block insurance companies from investing in certain asset classes, for example, infrastructure. Long-term assets (which are relatively illiquid) usually bring higher yields, which are associated with higher risks. Risk-based capital regulation frameworks, therefore, require higher solvency capital for insurers that invest in illiquid assets.

The main objective of this report is to provide an overview of the evolving investment strategies of insurers and to identify the opportunities and constraints insurers may face with respect to long-term investment activity. The report investigates the extent to which changes in macroeconomic conditions (e.g., low interest rates), market developments (e.g., changing roles of banks and capital markets), and insurance regulatory standards will affect the role of insurers in long-term investment financing. Policy implications from the findings are also discussed.
Presentations and Activities

December 4 – 5, 2014
Paris, France
OECD Insurance and Private Pensions Committee Meeting
Presentation of Draft Report

Insurers and Long-Term Investment: Evaluation of Insurer Portfolio

Investment Strategies – Opportunities and Constraints for Long-Term Investing
Prof. Dr. Helmut Gründl, Dr. Ming Dong, Prof. Dr. Jens Gal

OECD Roundtable on the Low Interest Rate Environment on Insurers
Elia Berdin

February 9 – 13, 2015
Sydney, Australia
Australian Prudential Regulation Authority (APRA)
Karel Van Hulle participated with a small group of experienced international regulators in a high level strategic review of the supervisory priorities and resourcing of the Australian Prudential Regulation Authority (APRA) in Sydney

February 24, 2015
Brussels, Belgium
Geneva Association Roundtable
Discussion on “What does Good Insurance Regulation Look Like? Engaging the Consumer
Prof. Karel Van Hulle

February 27, 2015
Frankfurt, Germany
EIOPA Roundtable on Investments in Infrastructure Projects
The Market for Infrastructure Investments and the Role of Insurers
Prof. Dr. Helmut Gründl

March 8 – 10, 2015
Doha, Qatar
9th MultaQa Qatar Conference (Qatar Financial Center)
Insurance Regulation: Solvency II – a Force for Good?
Prof. Karel Van Hulle

March 10 – 12, 2015
Brussels, Belgium
15th Annual Conference organised by the International Employee Benefits Association (IEBA)
Latest EU Developments on Occupational Pension Funds
Prof. Karel Van Hulle

March 15, 2015
Vienna, Austria
SUERF Conference: Asset-Liability Management with Ultra-Low Interest Rates
Institutional Investors’ Perspectives Overview
Prof. Dr. Helmut Gründl

March 16 – 19, 2015
Amsterdam, Netherlands
Risk Minds
Conference on Risk & Insurance
Panel: “The CRO View – CRO Debate”
Chair: Prof. Karel Van Hulle
April 21, 2015
Frankfurt, Germany
EIOPA Financial Stability Committee Stress Test Subgroup Meeting
Updated Results on the Impact of the Low Interest Rate Environment on Insurance—Special Focus on German Life Insurers
Prof. Dr. Helmut Gründl, Elia Berdin

April 16 – 17, 2015
Almaty, Kazakhstan
XIth International Risk Management Conference
Risk Management under Solvency II
Prof. Karel Van Hulle

May 14 – 15, 2015
Dublin, Ireland
Dublin International Insurance and Management Association (DIMA)
European Insurance Forum 2015
Solvency II: Why and How?
Prof. Karel Van Hulle

May 27, 2015
Luxembourg
Insurance Europe
7th International Insurance Conference on “The Globalisation of the Insurance Industry”
Moderation Prof. Karel Van Hulle

June 1 – 2, 2015
Malta
Commercial Risk Europe and the Malta Financial Services Authority (MFSA)
Malta International Risk Congress 2015
“Black Swan Rising”
The Future of Risk Regulation in Financial Services
Prof. Karel Van Hulle

August 6, 2015
Frankfurt, Germany
European Systemic Risk Board (ESRB) Seminar
European Insurance Companies: Low Interest Rates and Systemic Risk
Prof. Dr. Helmut Gründl, Elia Berdin

October 5, 2015
Frankfurt, Germany
EIOPA Advanced Seminar Quantitative Techniques in Financial Stability
Key Note Speech: Measuring and Ensuring Financial Stability in the Insurance Sector?
Prof. Dr. Helmut Gründl
Education
Studies. Lectures. Seminars.
One of the main pillars of the ICIR is education. In order to increase professional knowledge in the field of insurance and insurance regulation the ICIR offers several lectures and seminars within Goethe University’s business and economics bachelor and master programs.

Insurance is not felt to be exciting. It is too technical and it is not easy to explain. There is no simple insurance product. In addition, people tend to think about insurance when it is too late and if they were insured, they often have to struggle to receive an adequate compensation for their damage. As the importance of insurance – both life and non-life – is likely to increase in the future, it is important to explain more clearly what insurance is and what it is not.

Prof. Karel Van Hulle, ICIR Executive Board Member
Bachelor Degree

Corporate Finance (Finanzen III) (Summer and Winter Term)
Prof. Dr. Jan Pieter Krahnen
Prof. Dr. Helmut Gründl

The bachelor degree lecture “Finance III” covers corporate finance, insurance and risk management topics. The main goal is to equip students with the fundamental concepts of valuation, capital structure and risk management of financial institutions. They learn about the reasons why risk financing matters and how to use derivatives for hedging risks and what the difference between insurance and derivatives is.

Versicherung und Regulierung (Summer Term)
Prof. Dr. Hartmut Nickel-Waninger
Prof. Karel Van Hulle


Seminar on Risk Management in Insurance Companies (Winter Term)
Thomas Wilson, Ph.D., CRO Allianz Group

The seminar aims at introducing students to the basic concept of Risk Management in Insurance Companies. During the seminar, the students gain insight on how companies develop and assess their risks and the role of regulation. The range of topics covers all areas of traditional and non-traditional insurance activities and related regulation. The goal is to learn how to interpret, classify and critically discuss results of scientific research and, more in general, improve presentation and communication skills.

Lectures and Seminars of Prof. Dr. Manfred Wandt

- Deutsches und Europäisches Versicherungsvertragsrecht
- Internationales Wirtschafts- und Versicherungsrecht. Internationales Wirtschaftsrecht am Beispiel der Rückversicherung
- Haftungs- und Versicherungsrecht: Industriever sicherung

Institut für Versicherungsrecht (IversR)
This course examined insurance contract law – including the basics of insurance techniques – on a comparative basis. It focuses on the different legal systems of the EU’s Member States including the common law system and harmonization within the EU. The first part gave a general introduction into insurance contract law and into the several insurance contracts and their wordings. The second part dealt with the activities of insurance agents and brokers. The third part consisted of a description of the particular requirements of extra contractual obligations between insured and insurer, focusing upon the duty of utmost good.

The ICIR supported the Deutsche Versicherungsakademie (DVA) and the Gesamtverband der Deutschen Versicherungswirtschaft (GDV) in developing an executive education training program for professionals from the insurance industry. The objective of the training is to equip insurance experts and managers for the future requirements of Solvency II. Prof. Dr. Helmut Gründl teaches a course within the curriculum of the following certification programs:

- Certified Insurance Risk Manager Solvency II
- Certified Compliance Officer Solvency II
- Certified Internal Auditor Solvency II
Karel’s Club
Executive Insurance Forum

In cooperation with the Goethe Business School in Frankfurt, the ICIR initiated the Executive Insurance Forum – Karel’s Club – which brings together people from senior management in the insurance industry, academics and insurance supervisors.

Karel’s Club seeks to provide space for executives who are concerned about the future and want to prepare themselves for the challenges ahead through active discussion and sharing experiences with colleagues and regulators in a neutral university environment. The modern Campus Westend of Goethe University in Frankfurt, where the ICIR and the House of Finance are located, provides a uniquely rich and productive learning environment and an atmosphere of complete intellectual freedom.

The objective is to enable thought provoking discussions on matters of concern to the participants under Chatham rules. The discussions help to shape strategic thinking about the likely way in which insurance will develop in the coming years as well as on how regulation might influence this development.

This forum is addressed to senior management from the insurance industry, i.e. board members, chief risk officers, chief financial officers, actuaries, accountants, regulators, supervisors and policymakers. Although the discussions will take account of European developments in the context of Solvency II, the focus of the meeting is broader and attention is also paid to the European and international regulatory agenda.

Meeting with Karel and a select group of high level professionals from the insurance industry and related organizations in the context of Karel’s club was a great experience. It was very inspiring to have the opportunity to discuss – with an open mind and in a vitalizing environment – the challenges and opportunities of long-term investments.

Bart De Smet, CEO Ageas

ICIR Karel’s Club

Goethe Business School
Events Calendar
ICIR Events

October 29, 2014
Goethe University, Frankfurt
Workshop in cooperation with the Chair for Audit and Accounting of Goethe University and GenRe
IFRS 4 und Solvency II: Versicherungstechnische Rückstellungen im Lichte neuerer Entwicklungen
Prof. Dr. Michael Hommel, Goethe University
Prof. Dr. Helmut Gründl, Goethe University
Dr. Dieter Wemmer, Allianz SE
Dr. Joachim Kölschbach, KMPG
Moderation: Prof. Karel Van Hulle

December 4, 2014
Goethe University, Frankfurt
Inaugural Lecture of Professor Karel Van Hulle
Better (Insurance) Regulation: Search for the Holy Grail

January 30, 2015
House of Finance, Frankfurt
Talk on Insurance and Regulation
The European Regulation of Endowment Life Insurance and Occupational Pension Schemes: What's next?
Sven Giegold
Bündnis 90/Die Grünen, Member of The Greens in the European Parliament

May 19, 2015
House of Finance, Frankfurt
Talk on Insurance and Regulation
Corporate Governance in Insurance Regulations – With Goethe from Grey to Green to Gold?
Dr. Monica Mächler
Member of the Board of Directors of Zurich Insurance Group Ltd and Member of the Supervisory Board of Deutsche Börse AG

June 11–12, 2015
Goethe University, Frankfurt
Karel’s Club
Emerging Risks and Limits of Insurability
Moderation: Prof. Karel Van Hulle

September 8–9, 2015
Goethe University, Frankfurt
4th Conference on Global Insurance Supervision
Insurance: Globally under Pressure?
In cooperation with EIOPA, The World Bank Group and St. John’s University

October 26, 2015
House of Finance, Frankfurt
Talk on Insurance and Regulation
Solvency II, Ultralow Interest Rates and Consumer Protection – Life Insurance Product Development in Upheaval
Dr. Alf Neumann
Board Member of Allianz Lebensversicherungs-AG
Presentation of ICIR Research at Academic Conferences

**November 23 – 24, 2014**
Charleston, South Carolina, USA
2014 Southern Risk and Insurance Association (SRIA) Annual Meeting
The Effects of CoCo Bonds on Insurers’ Capital Requirements under Solvency II
Helmut Gründl, Tobias Niedrig

**February 5 – 6, 2015**
Brussels, Belgium
2015 Actuarial and Financial Mathematics Conference (AFMath)
The Guarantee Trap: A multidimensional Welfare Analysis
Christian Kubitza, Tobias Niedrig

**March 18 – 19, 2015**
Berlin, Germany
2015 Annual Meeting of the German Association for Insurance Science (Deutscher Verein für Versicherungswissenschaft)
Equity Based Systemic Risk Measures and the Insurance Industry
Elia Berdin, Matteo Sottocornola

**April 24, 2015**
Beijing, China
Conference on “C-Ross, the China Center for Insurance and Risk Management, Tsinghua University and Actuarial Science Research Group, KU Leuven
New Insurance Solvency Regime in China”
C-Ross and Solvency II: Brothers or Sisters?
Prof. Karel Van Hulle

**April 30, 2015**
Philadelphia, USA
Pension Research Council and the Boettner Center for Pensions and Retirement Research at the Wharton School of Business
Conference on “Implications of the New Regulatory Order for Retirement System Risk Management”
Risk Disclosure in the European Insurance Industry - Implications for Occupational Pension Funds
Prof. Karel Van Hulle

**May 8, 2015**
Philadelphia, USA
Temple University, Fox School of Business and Management
Workshop on Systemic Risk and the Insurance Industry
Insurance Activities and Systemic Risk
Elia Berdin, Helmut Gründl

**June 1 – 3, 2015**
Paris, France
32nd International Conference of the French Finance Association (AFFI)
The Guarantee Trap: A Multidimensional Welfare Analysis
Christian Kubitza, Tobias Niedrig

**August 3 – 6, 2015**
Ludwig-Maximilians-Universität, Munich, Germany
The World Risk and Insurance Economics Congress (WRIEC)
Escaping the Guarantee Trap
Christian Kubitza, Tobias Niedrig

**June 2015**

**The Effects of Contingent Convertible (CoCo) Bonds on Insurers’ Capital Requirements under Solvency II**
Helmut Gründl, Tobias Niedrig

**The Effect of Interest Rate and Longevity Risk on the Solvency and the Risk Taking Behavior of Life Insurers**
Elia Berdin

**The Benefit Trap: A Multidimensional Welfare Analysis**
Christian Kubitza, Tobias Niedrig

**Equity Based Systemic Risk Measures and the Insurance Industry**
Elia Berdin, Matteo Sottocornola

**The Effects of Contingent Convertible (CoCo) Bonds on Insurers’ Capital Requirements under Solvency II**
Helmut Gründl, Tobias Niedrig