

Annual Report
2015 ♦ 16
Systemic Risk in the
Insurance Industry



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Editorial



A cordial welcome to the readers of the ICIR Annual Report 2015/2016. With its theme of “Systemic Risk in the Insurance Industry”, it mirrors the outcome of a continuous discussion with all stakeholders involved: academia, regulation, supervision, industry and students.

We can proudly look back at a year characterized by focus and growth. The ICIR has contributed to topics of insurance and insurance regulation in many ways: through important research projects and through events where researchers, European policymakers and industry representatives could exchange their perspectives. Our research portfolio has covered the topics of systemic risk in the insurance industry, the impact of low-interest rate environment, aging society and digitalization.

I wish to thank the sponsors, the GDV and the State of Hesse for their trust and commitment. As part of the Goethe University, the ICIR receives considerable support from the University’s Presidential Board and from its various institutions such as SAFE.

The overall development continues to grow thanks to the strong bonds with people and institutions we cooperate with. My sincere thanks go to the members of the ICIR Executive Board and the ICIR Advisory Board for their strong leadership and continuous impulses creating a strong

foundation for the future. Special thanks go to Monica Mächler who, in her role as Chair of the ICIR Advisory Board, has helped to strengthen our important strategic developments with her outstanding advice and support.

With regard to the team, we have welcomed two outstanding doctoral students, Christian Kubitzka and Fabian Regele, who will focus on the topic of systemic risk and the impact of insurance regulation.

I thank all the ICIR team members for their great work throughout the year.

Enjoy reading our Annual Report, and we look forward to welcome you at the ICIR!

A handwritten signature in black ink, appearing to read 'H. Gründl'.

Prof. Dr. Helmut Gründl,
Managing Director of the ICIR

The Year at a Glance

March 8 – 9, 2016
Frankfurt, Germany

Karel's Club
**Good Governance:
Myth or Reality?**
Dr. Monica Mächler, Bart
De Smet, Gabe Shawn
Vargas, Alberto Corinti,
Gabriel Bernardino,
Prof. Michele Siri, Raj Singh,
David Hare, Dr. Hans J.
Büsselberg, Romain Paserot

March 10 – 11, 2016
Vienna, Austria
ICIR Research
Presentations at
**Annual Congress of the
German Insurance
Science Association 2016**

June 28, 2016
Frankfurt, Germany
**A Critical Perspective
on the Solvency II
Implementation –
An (Un)level Playing
Field in Times of
Low Interest Rate**
Dr. Dieter Wemmer
(Allianz SE) and
Dr. Frank Grund (BaFin)

July 7, 2016
Frankfurt, Germany
SAFE ICIR Research
Seminar
**Risk Attitudes,
Family Transitions
and the Economy**
Mark Browne, Ph. D.
St. John's University,
New York, US

August 7 – 10, 2016
**Boston Cambridge,
MA, USA**
ICIR Research
Presentations at
**2016 Annual Meeting of
the American Risk and
Insurance Association
(ARIA)**

September – October, 2016
New York, USA
**Berkley Research Fellow
Irina Gemmo**
at the School of Risk
Management, Insurance
and Actuarial Science,
St. John's University

September, 2016
Second Edition of the
Book Publication
**„Solvency II – Eine Ein-
führung Grundlagen der
neuen Versicherungs-
aufsicht“**
Prof. Dr. Helmut Gründl,
Prof. Dr. Mirko Kraft
(Hrsg.)

September 12, 2016
Prof. Dr. Helmut Gründl
**Appointed as of the
Insurance Advisory
Council of the Federal
Financial Supervisory
Authority (BaFin)**

October 20, 2016
**House of Finance,
Frankfurt**
**Community Life -
Rethinking Insurance
for Times of
Digital Change**
Dr. Claudia Lang

November 8 – 9, 2016
Academic Visitor and
Seminar
**Optimal Retirement
Spending and Insurance
When Biological Age and
Chronological Age Differ**
Prof. Moshe A. Milevsky
Schulich School of
Business, York University,
Toronto, Canada

November 16 – 17, 2016
Bad Homburg, Germany
ICIR-SAFE Research
and Policy Workshop
**Systemic Risk in the
Insurance Industry**
Gabriel Bernardino (EIOPA)
Felix Hufeld (BaFin)
Catherine Lezon (IAIS)
Francesco Mazzaferro
(ESRB)
Dr. Michael Menhart
(Munich Re)
Christian Thimann (AXA)

December 12 – 13, 2016
LMU, Munich, Germany
ICIR Research
Presentation at
**CEAR/MRIC Behavioral
Insurance Workshop
2016**

The ICIR at Goethe University





Goethe University's Mission Statement*

*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.

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.

ICIR

Its Three Missions

Why ICIR Matters

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

Education

The ICIR offers several lectures and seminars within the Bachelor and Master degree programs at the Faculty of Economics and Business Administration of Goethe University in order to increase professional knowledge in the field of insurance economics and insurance regulation.

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.

Funding and Partners

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 of Insurance and Regulation
Goethe University

Managing Director
International Center for
Insurance Regulation (ICIR)

Prof. Karel Van Hulle
Honorary Professor
Goethe University
Associate Professor
KU Leuven

Member of the 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



Dr. Frank Grund
Chief Executive Director of Insurance and Pension Funds Supervision, Federal Financial Supervisory Authority BaFin



David Hare
Partner, Actuarial & Advanced Analytics, Deloitte UK, Edinburgh



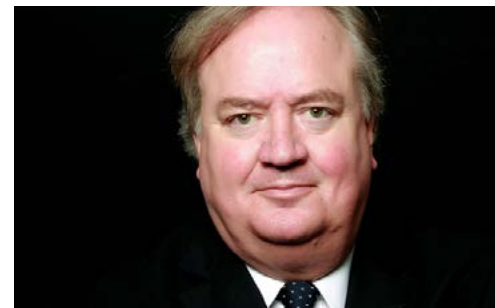
Dr. Monica Mächler
Member of the Supervisory Board of Directors of Deutsche Börse AG and of Zurich Insurance Group Ltd. (Chair of the ICIR Advisory Board)



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



Prof. Dr. Brigitte Haar
Vice President, Goethe University
Chair of Private Law, German, European and International Business Law, Law and Finance, and Comparative Law, Goethe University



Dr. Denis Kessler
Chairman of the Board of Directors and Chief Executive Officer of SCOR SE, Paris



Prof. Dr. Hartmut Nickel-Waninger
Honorary Professor, Goethe University



Dr. Norbert Rollinger
CEO, R+V Allgemeine Versicherung AG,
Wiesbaden
(Vice-Chair of the ICIR Advisory Board)



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



Dr. Klaus Wiener
Member of the Management Board of
the German Insurance Association,
(Gesamtverband der Deutschen
Versicherungswirtschaft e. V. (GDV)), Berlin



Dr. Petra Roth
Former Lord Mayor of Frankfurt am Main

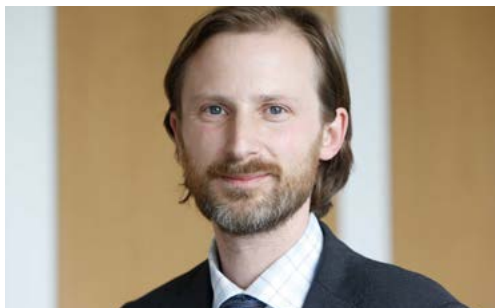


Raj Singh
Group Chief Risk Executive Officer,
Standard Life plc., Edinburgh

The 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



Fabian Regele
Research Assistant and Doctoral Student



Jan-Hendrik Weinert
Research Assistant and Doctoral Student



Arina Brutyan
Student Assistant



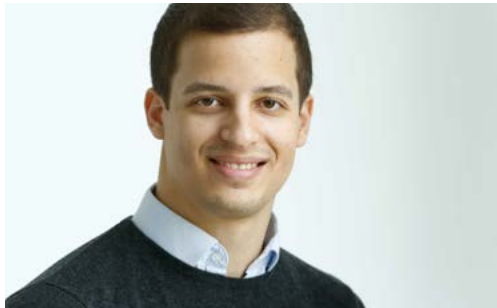
Lorenz Ebermann
Student Assistant



Sebastian Flick
Student Assistant



Martina Gavran
Student Assistant



Jérôme Sareika
Student Assistant



Hendrik Schlüter
Student Assistant

Alumnus Elia Berdin

➤ **Elia Berdin**
Risk Manager,
Assicurazioni Generali S.p.A (Milan)
Research Assistant and Doctoral Student
ICIR, Goethe University 2012-01/2016



I started as Doctoral Student and Research Assistant at the International Center for Insurance Regulation (ICIR) in October 2012. I arrived at the center just few years after its foundation and it felt like joining a start-up, with a reputation and a prestige yet to be built. Joining at that time was on the one hand a great opportunity to be part of such a unique venture, but on the other hand it gave my colleagues and myself a great responsibility. Looking at the ICIR now, we can be proud of what has been achieved thus far.

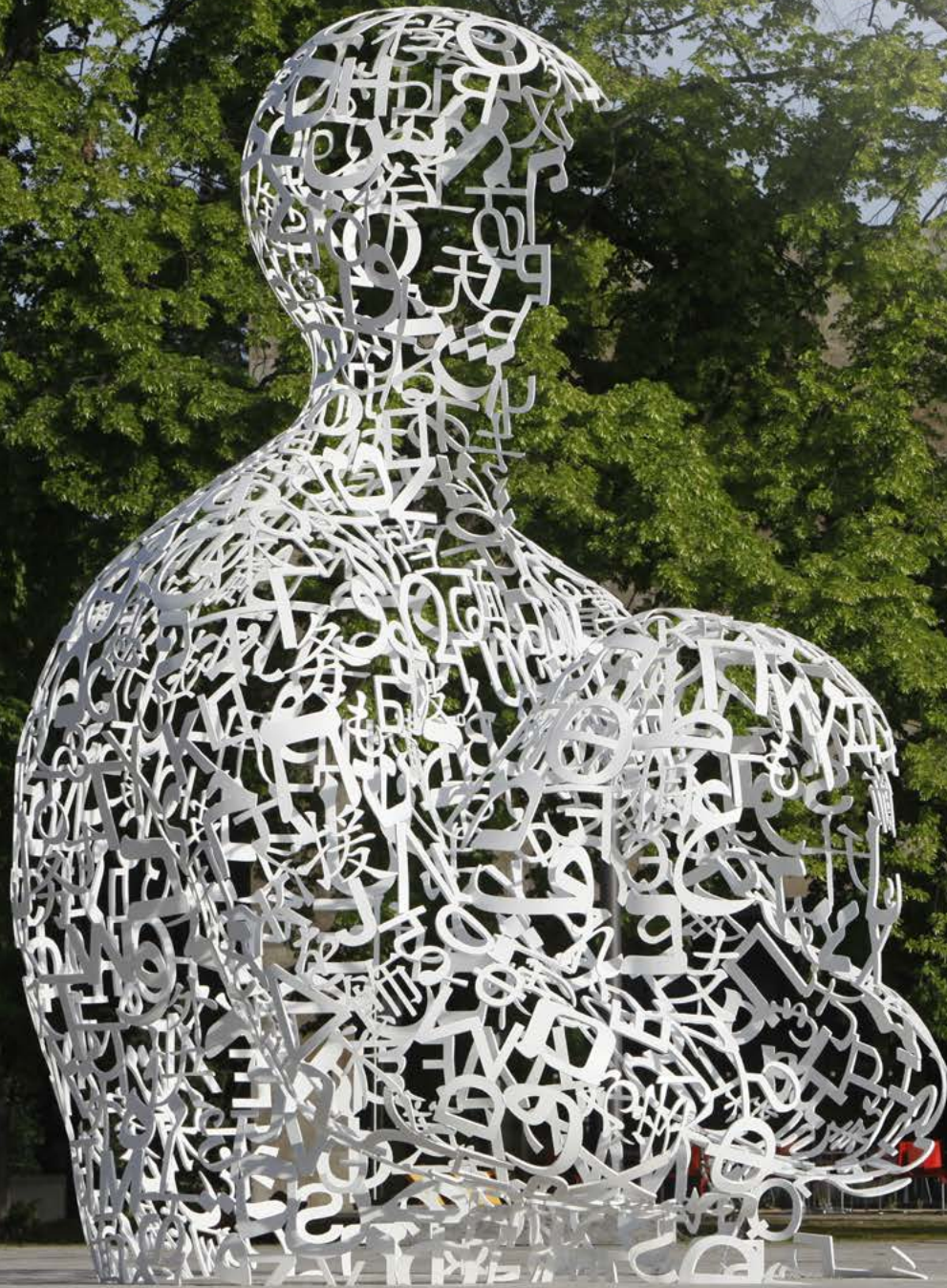
I recall my early days with great excitement: the environment was superb and the opportunities to get in touch with policy makers, industry experts and high caliber researchers were countless. The center quickly gained attention within the insurance community: the combination of cutting edge research and the involvement in the policy debate were key to the success. In addition, the close cooperation with EIOPA in the organization of the “Global Insurance Supervision” conference made the ICIR an absolute reference institution in the debate on insurance regulation.

My little contribution to the success of the ICIR came mainly from my research: right at the beginning of my doctoral studies, I worked together with Prof. Gründl on the effects of low interest rates on life insurers. The analytical framework we developed attracted some interest from supervisors and central banks. Thus, few years later, I developed a similar framework for the financial stability division of the ECB. Through this experience I realized how much sharp research can help in dealing with real life problems.

The time I spent at the ICIR was intense but at the same time enjoyable. I learned a lot as a student and I grew enormously as a professional. The ICIR provided me with a unique platform to develop my ideas and to participate to the policy debate in insurance. Now in my new career as insurance professional I will continue to be an ambassador of the ICIR in the world. ♦

Research Insurance. Risk. Regulation.





The ICIR Research Portfolio

➤ ICIR Working Paper Series

1,2,3
Research projects supported by the Deutschen
Verein für Versicherungswissenschaft e.V. (DVfVW)

4
Part of the SAFE Project "Liquidity and Longevity
Risk Management of Households and Life Insurance
Companies in an Ageing Society"

5
In cooperation with SAFE

6
In cooperation with School of Risk Management,
St. John's University



Insurance and Risk Management

Interest Rate Risk, Longevity Risk and the Solvency of Life Insurers¹

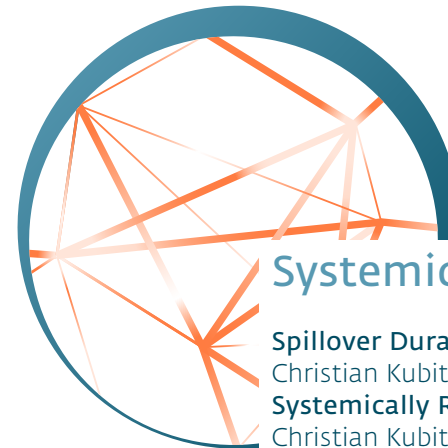
Elia Berdin

The Effects of a Low-Interest-Rate Environment on Life Insurers²

Elia Berdin, Helmut Gründl

A Stochastic Forward-Looking Model to Assess the Profitability and Solvency of European Insurers

Elia Berdin, Cosimo Pancaro (ECB), Christoffer Kok (ECB)



Systemic Risk in the Insurance Industry

Spillover Duration of Stock Returns and Systemic Risk

Christian Kubitz, Helmut Gründl

Systemically Relevant Business Activities of Insurance Companies⁵

Christian Kubitz, Fabian Regele, Helmut Gründl

Insurance Activities and Systemic Risk

Elia Berdin, Matteo Sottocornola

Life Insurance in an Aging Society

The Modern Tontine: An Innovative Instrument for Longevity Risk Management in an Aging Society³

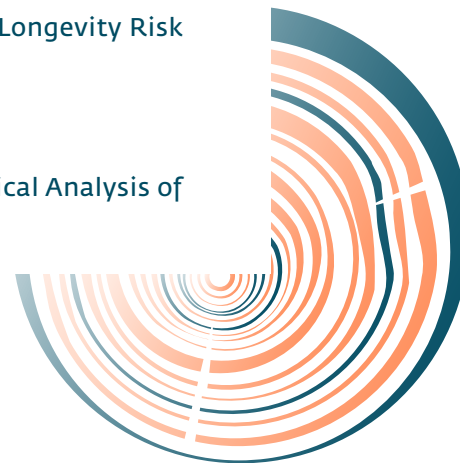
Jan-Hendrik Weinert, Helmut Gründl

The Fair Surrender Value of a Tontine

Jan-Hendrik Weinert

Life Insurance and Demographic Change: An Empirical Analysis of Surrender Decisions Based on Panel Data⁴

Irina Gemmo, Martin Götz



Digitalization in the Insurance Industry

Transparency Aversion and Insurance Market Equilibria⁶

Irina Gemmo, Mark J. Browne, Helmut Gründl

Law

EIOPA's Guidelines within the European System of Financial Supervision

Jens Gal

Information Duties of Insurers

Jens Gal

The Temporal Application of the German Insurance Contract Act to old Insurance Contracts

Jens Gal

Arbitration in Insurance Matters

Jens Gal

Systemic Risk, Systematic Risk, and the Identification of Systemically Important Financial Institutions

The usefulness of systemic risk measures for regulators and policy-makers is determined by three factors: reliability, provision of new information and focus on a clear direction of spillovers from institutions to markets. There are several shortcomings in the performance of two popular systemic risk measures, MES and ΔCoVaR , in regard to these factors. We present an alternative systemic risk measure, the CoSP, which is able to improve the usefulness of measuring systemic risk. Interestingly, CoSP is able to identify systemically important institutions without imposing any assumptions about the drivers of systemic risk or the actual number of systemically important institutions.

Since the 2007–2008 financial crisis, the vulnerability of the global economy to the distress of single banks and other financial institutions has been of special interest to regulators and policymakers. This led to a shift in focus of international regulatory approaches – from microprudential to macroprudential regulation. The first is mainly concerned with the solvency risk of single institutions, resulting from their individual exposures to the underlying market's risk, i.e. systematic risk. In contrast, the contribution of institutions to crises, i.e. systemic risk, is of central concern for macroprudential regulation. Following this shift of focus, a number of banks and insurers were designated as systemically important by the Financial Stability Board (FSB) and the International Association of Insurance Supervisors (IAIS). These Systemically Important Financial Institutions (SIFIs) are subject to closer monitoring and are required to hold additional capital.

Contrary to systematic risk, systemic risk is not concerned with the general co-movement of single institutions' assets with the overall market. Systemic risks arise from spillovers of particularly severe distress events, since these will typically result in systemic consequences. In systemic risk, such spillovers have a clear direction: from institutions to markets. ▶





➤ Christian Kubitzka

➤ Helmut Gründl

The literature has identified various channels that may amplify the transmission of institutions' distress to markets. Examples include interbank lending or CDS trading (see Benoit et al. (2016) for an overview). With these specific channels in mind, the FSB and IAIS base their identification of SIFIs on institution-specific indicators that may contribute to systemic risk. Key indicators include size, interconnectedness and substitutability (see Basel Committee on Banking Supervision (2013) and International Association of Insurance Supervisors (2016)).

Systemic risks arise from spillover of particularly severe distress events.

However, in response to the FSB and IAIS methodology, several authors have been stressing the substantial differences in the business models of different institutions, particularly between banks and insurers (see Thimann (2014)), and the resulting potential differences in the interpretation of the FSB and IAIS indicators for systemic risk. While the IAIS reacted by adjusting the weights of the indicators for insurers, the key indicators themselves are still very similar to those used for banks.

Measuring Systemic Risk

Clearly, there is a strong need for systemic risk measures that do not ex ante depend on a specific relationship between business activities and systemic risk, but may be used ex post to identify this relationship. Academics have been developing various cross-sectional systemic risk measures that aim at directly measuring an institution's contribution to systemic risk. The Marginal Expected Shortfall (MES) and Systemic Expected Shortfall (SES) by Acharya et al. (2016) and the ΔCoVaR by Adrian and Brunnermeier (2016) are among the most popular of these cross-sectional systemic risk measures. The SRISK by Brownlees and Engle (2016) and dependence-consistent ΔCoVaR by Mainik and Schaanning (2014) are based on them.

Regulators and policy-makers endeavor to monitor the systemic risk contribution of single institutions and draw conclusions about the drivers of systemic risk. For these applications, cross-sectional systemic risk measures prove useful only in case they 1) are reliable, 2) provide new information and 3) are based on a clear direction of spillovers from an institution to a market. This implies, in particular, that regulators should be able to distinguish between systemic risk and systematic risk very clearly.

However, the large unreliability of ΔCoVaR (see Danielsson et al. (2016)), indicates that this measure (and measures

that are based on it) might violate the first condition of being useful for regulators. Moreover, by assuming that systemic risk materializes instantaneously, MES and ΔCoVaR exhibit a strong interconnection with systematic risk (see Benoit et al. (2016)). Indeed, we find 96% correlation between MES and systematic risk, as given by the beta factor, and 51% correlation between the dependence-consistent ΔCoVaR and systematic risk. Thus, it seems disputable that these measures fulfill the second condition of being fully useful for regulators. Eventually, the un-

Regulators should be able to distinguish between systemic risk and systematic risk.

derlying assumption that systemic risk materializes instantaneously makes it difficult to establish a clear direction of spillovers, as required by the third condition.

Timing and Persistence of Systemic Risk

In contrast to the reasoning of MES and ΔCoVaR , numerous crises have demonstrated that distress events do not necessarily materialize instantaneously. Instead, they may cause persistent market distress, which in turn may lead to an impairment of the financial sector with possible severe ►

consequences for the real industry. To capture this persistence, in Kubitzka and Gründl (2016) we consider an institution as significantly systemically important (s.s.i.) if its distress has a significant and persistent negative impact on a market. This classification is an alternative to the FSB and IAIS methodology, since our results are solely driven by the actual risk of spillovers of shocks from an institution to a market, i.e. an institution's contribution to systemic risk.

Distress events may cause persistent market distress and lead to impairment of the financial sector.

To measure the magnitude and duration of systemic risk, we propose to employ the Average Excess CoSP and Spillover Duration. Both measures display a much smaller correlation with systematic risk (26% and -4%, respectively) than MES and the dependence-consistent ΔCoVaR , and are thus better able to distinguish between systemic and systematic risk. By focusing on the persistence of spillovers, we strengthen the attention to a clear direction of spillovers. This provides an advantage with regard to the second and third condition of being

useful for regulators. The Average Excess CoSP and Spillover Duration are based on the CoSP, which reflects the likelihood of a systemic market event subsequent to a financially adverse shock of an institution. While in its underlying structure CoSP is very similar to the dependence-consistent ΔCoVaR , it is substantially more reliable. Thus, we yield an improvement with regard to the first condition outlined above.

Size and Sector-Specific Systemic Risk

We detect significant spillovers of shocks from institutions to markets at various time horizons. During crises, this persistence is particularly large (up to 80 days), while it is substantially smaller in non-crisis times. Our analysis shows that market capitalization, the type of market and the type of institution significantly drive systemic risk.

A larger market capitalization relates to an increasing likelihood that an institution is significantly systemically important (s.s.i.) and imposes a higher level of systemic risk, measured by the Average Excess CoSP. Also, the average duration of the impact of spillovers, as given by the Spillover Duration, is longer for institutions with a larger market capitalization. Since market capitalization is an indicator for the size of an institution, this result is in line with the indicator-based methodology of the Basel Committee on Banking Supervision (2013) and International Association of Insurance Supervisors (2016).

The CoSP-based measures reveal significant differences between different types of institutions. Our empirical results suggest that brokers trigger the highest and most persistent level of systemic risk, followed by real estate firms, commercial banks and insurers.¹ Insurance carriers trigger the least persistent level of systemic risk in comparison to other financial institutions. In contrast, they are exposed to the most persistent systemic risk from other institutions. The systemic riskiness of non-financial companies has also been causing serious

Insurance carriers trigger the least persistent level of systemic risk.

debates: Other systemic risk measures indicate that non-financial companies trigger the highest level of systemic risk, which seems to go against economic intuition (see Guntay and Kupiec (2014)). While our analysis confirms this result for the dependence-consistent ΔCoVaR , the CoSP-based measures signal that non-financial companies trigger the smallest systemic risk. This result is very robust and seems to be more in line with economic intuition. ▶

Finally, different markets also exhibit a significantly different vulnerability to systemic risk. While the exposure to systemic risk is the smallest for the brokerage market, insurance companies are most vulnerable to large and persistent systemic risk. Thus, insurers pose a smaller systemic risk to other financial institutions than they are exposed to.

Concluding Remarks

The new CoSP-based systemic risk measures proposed by Kubitzka and Gründl (2016) improve the measurement and perception of systemic risk in various ways. Firstly, they exhibit a larger reliability and distinguish systemic risk from systematic risk more clearly than other common systemic risk measures. Secondly, they reflect the persistence of systemic shocks we have observed in various crises. Thirdly, the ranking of institutions according to systemic risk implied by CoSP-based measures is very robust and more in line with economic intuition than that of other measures.

As many other systemic risk measures, CoSP is based on historical stock returns. Thus, it is not able to forecast a crisis as long as market participants do not foresee this crisis. However, particularly the spillover duration is able to partly detect an increased persistence of shocks before a crisis occurs. Also, CoSP-based systemic risk measures may be used to identify differences in the systemic risk contribution of different institutions,

vulnerability of markets and drivers of systemic risk. They are thereby able to motivate and substantiate indicator-based models of systemic risk and to reveal channels that support the propagation of systemic risk. Eventually, our findings may lay the foundation for a more target-oriented and refined identification and regulation of systemically important institutions. ♦

References:

- Acharya, V., Pedersen, L., Philippon, T., and Richardson, M. (2016). Measuring systemic risk. *Review of Financial Studies*, Forthcoming.
- Adrian, T. and Brunnermeier, M. (2016). Covar. *American Economic Review*, 106(7).
- Basel Committee on Banking Supervision (2013). Global systemically important banks: updated assessment methodology and the higher loss absorbency requirement.
- Benoit, S., Colliard, J.-E., Hurlin, C., and Pérignon, C. (2016). Where the risks lie: A survey on systemic risk. *Review of Finance*, forthcoming.
- Brownlees, C. and Engle, R. (2016). SRISK: a conditional capital shortfall measure of systemic risk.
- Danielsson, J., James, K. R., Valenzuela, M., and Zer, I. (2016). Can we prove a bank guilty of creating systemic risk? a minority report. *Journal of Money, Credit, and Banking*, 48(4).
- Guntay, L. and Kupiec, P. (2014). Taking the risk out of systemic risk measurement.
- International Association of Insurance Supervisors (2016). Global systemically important insurers: Updated assessment methodology.
- Kubitzka, C. and Gründl, H. (2016). Spillover Duration of Stock Returns. ICIR Working Paper 20/2016.
- Mainik, G. and Schaanning, E. (2014). On dependence consistency of covar and some other systemic risk measures. *Statistics & Risk Modeling*, 31(1).
- Thimann, C. (2014). How insurers differ from banks: a primer on systemic regulation. SRC Special Paper No 3.

“All Insurers are Currently Searching for Yield”



Aggregate surrender rates by age of household head. The blue line displays all contract termininations, including those at contract maturity, the red line displays only contract termininations within the first 11 years of policy holding.

Interview with Prof. Dr. Helmut Gründl based on the ICIR-SAFE research project “Life Insurance and Demographic Change: An Empirical Analysis of Surrender Decisions Based on Panel Data”

Which research questions are you currently focusing on?

At my chair, we focus on insurance and insurance regulation topics, currently especially with respect to life insurance. One ongoing project is on an insurance annuity product named tontine, which dates back to the Middle Ages. The idea behind is that a group of people pays into a pool and, thereafter, gets annuities which increase when group members die. We analyze whether a modernized form can be a valuable supplement for old age provision in an aging society. In another project we develop a systemic risk measure that takes into account the contagion period between a triggering event and a subsequent systemic event in order to determine factors that drive possible systemic risk in the insurance industry. ▶



➤ Irina Gemmo

➤ Helmut Gründl

Together with SAFE researchers Martin Götz and Irina Gemmo, you are also working on a paper that deals with the topic of insurance surrender, i.e. the premature termination of life insurance policies. What is your objective?

In a first step, we aim to identify individual and household characteristics that influence liquidity demand in certain life phases because the termination of life insurance policies is usually associated with an urgent need for liquidity. We base our analysis on data of the Socio-Economic Panel

Termination of life insurance policies is usually associated with an urgent need for liquidity.

which consists of long-term survey data from 11,000 German households. In contrast to other studies, which usually work with aggregated figures, we look at the individual household, which enables us to take the age of policy holders at the time of surrender into account (see Figure 1). For example, we find that the probability of a divorce to be a driver for a surrender decision increases with the age of the couple, which can be explained by the fact that the costs of divorces rise with age. With respect to the birth of a child, the surrender probability is especially

high with young couples and those that have recently had their first child. Of course, we also control for other parameters such as unemployment, income and the acquisition of real estate that are well known to influence surrender decisions. By assigning certain surrender triggers to age groups, we are also able to derive more general predictions about how demographic change will affect life insurance surrender rates.

These results will certainly be of interest for insurance companies.

Absolutely. Therefore, in a second step, we will insert these findings into a multi-period shareholder value model of a life insurance company with different investment choices. We aim to find out which impact surrender decisions have on the company's investment behavior. A large surrender rate might, for example, keep the insurer away from investing in long-term assets that would be important to secure considerable returns, especially in times of low interest rates.

Can large surrender rates affect the stability of an insurance company? One could imagine that the companies set their prices according to this risk.

On the profit-loss side there is indeed no real stability risk, given the observable surrender discounts. However, problems can arise on the liquidity side. In theory, what we know as "bank run" is also possible in the insurance

sector. In particular against the background of the low and negative interest rate environment, it is not inconceivable that some life insurers get into financial distress and, thus, customers lose trust in a single company or even in the industry as a whole. Another scenario would be rising interest rates after a period of very low rates. This might induce a large number of customers who hold policies with very low guaranteed investment returns to surrender because they would get better conditions elsewhere. As a mass behavior this could evoke a liquidity

All insurers are currently searching for yield which they try to find in long-term assets.

problem for life insurers – and not only for them. If insurers had to sell assets in a "fire sale" situation, this could cause a downward spiral for asset prices and thus affect financial markets as a whole and even the economy beyond. ▶

Can insurance companies design their contracts in a way that would help to lower surrender rates?

A general idea to overcome the problems that arise with either very low or rising interest rates would be to generally decrease the guaranteed return rates. This may sound paradoxical but it would make all parties better off. The insurers could easily fulfil their commitments so that solvency risk would go down; the insurers would need less equity capital to back the guarantees. Thus, equity capital is set free to back riskier and, in the long run, more profitable investments. As a consequence, policyholders would benefit from higher surplus participation. The drawback however is that you cannot swap existing contracts. The change can only come into effect with new contracts. This implies that, for a very long time, companies have to continue to suffer from the sins of the past ...

... which are especially painful given the current situation of negative interest rates.

True. All insurers are currently searching for yield which they mainly try to find in long-term assets, for instance infrastructure investments. This brings us back to the question of an optimal investment strategy for insurers: how many long-term – but illiquid – assets can they hold to get the desired returns while, at the same time, disposing of sufficient liquidity to satisfy policy surrenders? With our project we aim to address this problem by giving more concrete information with respect to the long-

term development of surrender-rates and the ensuing costs and benefits for the parties involved.

What is the regulator's approach to this problem?

Insurance regulation faces a tradeoff. In terms of consumer protection, we observe the tendency to allow customers to surrender their policies whenever they like and grant them considerable surrender values. While this is certainly important when you think of these unforeseeable situations in life when cash is urgently needed, people often neglect that, by protecting customers who surrender, you harm those who stick to their contracts for old age provision. They forgo the illiquidity premiums that could be collected if insurers were able to follow a long-term investment strategy.

Is a life insurance policy still an investment vehicle that people should consider?

For sure. There is no other possibility to hedge longevity risk – the risk of out-living your money – as well as mortality risk when you think of term life insurances. I suppose that, in the long run, life insurers will concentrate on these two core parts of their business. ♦

The Innovative Old-Age Provision Product Tontine: An Instrument to Mitigate the Problems of a Society Experiencing Ever-Increasing Longevity

Demographic change patterns in society in the form of declining birth rates amid simultaneously rising life expectancy are resulting in difficulties in provision for old-age. The number of beneficiaries of statutory old-age pension insurance is growing, whereas the number of contribution payers is declining at the same time.

The Demographic Challenge and the Retirement Smile

The related increase in what is known as the pension quotient renders the maintenance of pay-as-you-go (PAYG)-based old-age provision systems such as the statutory pension system in Germany more difficult. In contrast, funded pension provision products characterized by individual savings of financial resources for the time after entering the pension phase are gaining increasing importance. This problematic situation of an ever-increasingly aging society structure is being compounded by rising needs for financial resources on the part of senior citizens. Thanks to medical advances made in past decades, meanwhile a large number of illnesses and complaints can be treated that used to be terminal in nature only 50 years ago. However, these medical measures and treatment methods are frequently associated with enormous costs, especially in advanced age, when afflictions tend to become more frequent. This trend is also discernible according to a study carried out by Standard Life in 2013, which shows that on average, the total expenditure of a person aged 85 is six times higher than that of a comparable 65-year-old person. The development of capital needs of senior citizens can be described in a U-shaped development that is also referred to as the Retirement Smile (see Figure 2).

At the beginning of their pensionable age, persons drawing a pension frequently are in good physical shape and now ▶

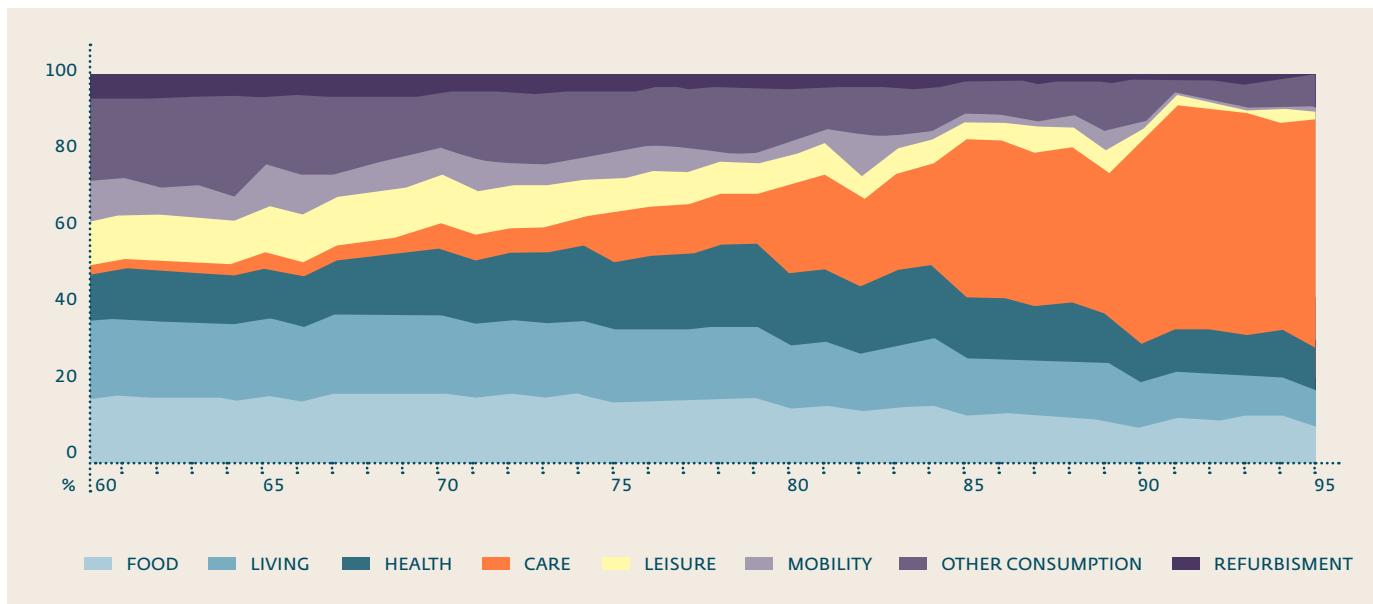


Figure 1: Breakdown of Costs as a Senior Citizen's Age Progresses

have the time to pursue their favorite pastimes. For instance, many pensioners spend their initial phase after retirement on expensive travels or hobbies, resulting in a higher total expenditure level than before they retired. After a number of years in retirement, however, consumer spending declines appreciably. Pensioners no longer take vacations so often, and expenditure on theater tickets, concerts and other leisure activities declines (see Figure 3).

At the same time, their physical condition still is very good on average. This leads to a decline in spending on consumption, while medical costs still remain relatively constant. As a result, total expenditure in this phase of life declines. Frequently, however, the last few years of life are accompanied by severe afflictions and infirmities that call for expensive nursing services or hospitalization, causing an extreme increase in financial resources needed (see Figure 4 and Figure 5).

Accordingly, a costly conversion or extension of senior citizens' own homes may be necessary to enable them to live independently and unassisted in their accustomed environment. Moreover, at an advanced age very high nursing costs may be incurred on average for out-patient and in-patient nursing care (see Figure 6).

From the start of pensionable age, the significance of nursing costs continually increases while consumption spending is increasingly less relevant (see Figure 1). ▶

Average Cost of Living in Euro per Month

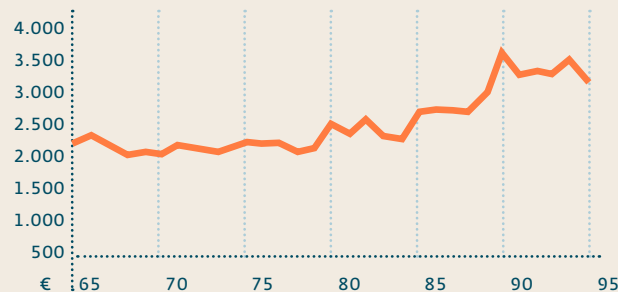


Figure 2: The retirement smile (own figure based on SOEP data)

Average Expenses on Leisure Activities in Euro per Month

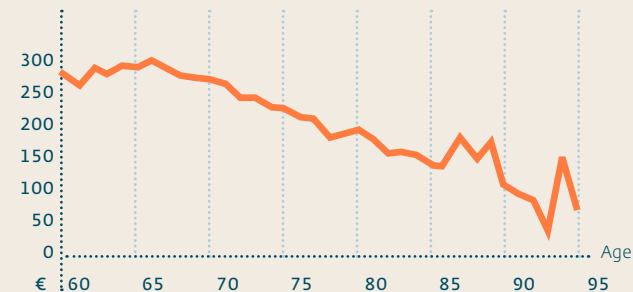


Figure 3: Average costs for out-patient care in euro per year (own figure based on SOEP data)

Average Costs for In-Patient Care in Euro per Year

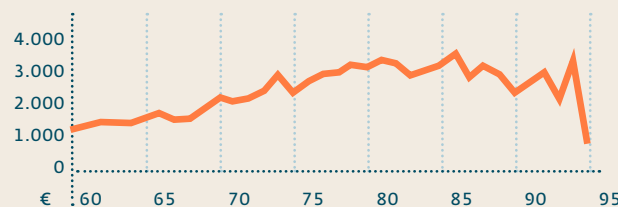


Figure 4: Average costs for in-patient care in euro per year (own figure based on SOEP data)

Average Costs for Out-Patient Care in Euro per Year

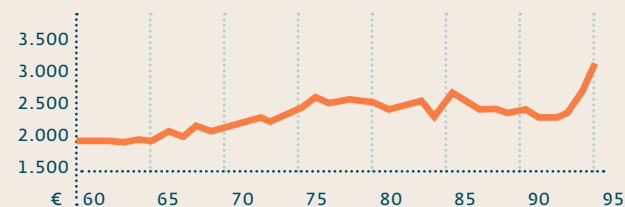


Figure 5: Average costs for out-patient care in euro per year

Expected Average Costs of Nursing Care

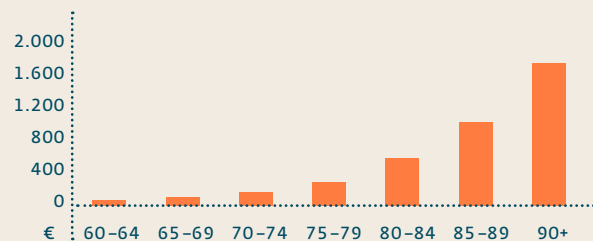


Figure 6: Expected average costs of nursing care (own figure based on SOEP data)



➤ Jan-Hendrik Weinert

➤ Helmut Gründl

Apart from these demographic challenges, not only the insurance industry but also individual savers are exposed to the impacts of the current low-interest environment. It is becoming increasingly difficult and expensive to fund the high level of expenditure at advanced age via private pension insurance or general savings products.

The Tontine as a Resolving Instrument for the Retirement Smile

The challenges described raise the question concerning the search for an old-age provision product that delivers sound and well-established answers to these problem scenarios. It would need to be innovative enough to release the insurer from guarantee commitments and the assumption of the risk of longevity and simultaneously provide sufficient insurance benefits to satisfy a further increase in capital requirements of aging pensioners.

These considerations have led to the principle of the tontine that has been known for centuries, a system that can be adjusted to take account of current events and circumstances prevailing from time to time and do justice to the challenges of a world that has entered the 21st century.

In their original sense, tontines, named after their Italian inventor Lorenzo de Tonti, can be characterized by a one-off payment by the tontine holder, originally to the

state, which then grants the “tontinist” life-long retirement annuities. The special feature of a tontine, however, is that these pension payments increase as the pensioner grows older since the number of remaining “tontinists” decreases due to deaths, making it possible for one and the same amount of money to be distributed to fewer people. According to this logic, the last survivor receives the pension payments of all others. This circumstance makes tontines appear extremely interesting against the backdrop of increasing costs associated with advanced age.

An ever-increasing aging society structure is being compounded by rising need for financial resources.

Beyond this, it is not the provider of a tontine that bears the longevity risk, but all tontine holders together in the sense that they receive lower than originally anticipated pension payments in the event of unexpected longevity. This, in turn, has the benefit for a tontine provider, e.g. an insurer, that no expensive equity capital needs to be maintained in order to hedge this particular risk. This, and the simple structure of the tontine, leads to the conclusion that tontines would yield a substantially leaner cost structure than conventional life insurance products. On

the other hand, the tontine holder is exposed to uncertain tontine payments in terms of their extent and chronological structure, which means that the pros and cons of the tontine need to be considered and weighed. It is also possible for each “tontinist” to invest the one-off contribution in the beginning in equities, which can be rather risky but rich in opportunities; after all, the insurer is not required to meet any guarantee claims in relation to the tontine holder. Accordingly, on the one hand there are prospects of higher earnings; on the other, capital market losses can be mitigated by the mortality effect of the tontine, i.e. the scheduled increase in benefits payable.

In our research on tontines, we developed a model in which we consider a certain number of tontine holders of any gender and age who pay a desired one-off payment into a tontine product at the beginning. We examine the impacts on the prosperity of a tontinist by comparing the liquidity needs at pensionable age and disbursements from a conventional old-age provision product and those of a tontine. Our model includes individual preferences, age and gender as well as a subjective perception of remaining life expectation.

Let us first of all consider the case of a full investment of the total pension assets available in a traditional life-long annuity, i.e. if we initially dispense with the need to purchase a tontine, the extent of the disbursements will ►



be constant. Increased liquidity needs now therefore result in a growing volume of money in the course of time that will not be available.

Opposite results are achieved by the case of full “tontinization” of the available assets. In this context, the fact that future pension payments depend on the mortality of the members of a tontine pool plays an important role: at the beginning of the disbursement phase, the predominant proportion of these participants are still drawers of tontine payments; however, the more sharply this pool now declines in terms of numbers due to deaths, the higher will own tontine payments turn out to be. In summary, in this case it can thus be said that at the beginning of the pension phase, there is not sufficient liquidity available; however, in the course of time the sum available will increase sharply and will be adequate to finance high illness or nursing costs in very much later years that are not covered by health and nursing care insurance.

The two extreme cases just described, namely of full participation in a conventional pension product or a tontine, illustrate that adequate satisfaction of liquidity needs at pensionable age can only be achieved through a combination of both product types. However, what exactly should such a combination look like? It will be achieved once the benefits offered by a conventional pension product in early pension years can be ideally

combined with the benefits of a tontine in later pension years. The lower the liquidity needs in early pension years and the higher they turn out to be in later years, the more advantageous will a tontine prove to be.

Implications for Optimal Old-Age Provision

In summary, therefore, it can be noted that the current problems of an aging society in conjunction with the ongoing low interest phase will call for innovations to be made in the case of pension provision products.

Our results show that a portfolio consisting of a conventional pension product and an innovative tontine provides the maximum benefit for pensioners with average assets. In the process, pension products remaining constant in extent are augmented by growing disbursements of a tontine as a senior citizen's age progresses. A tontine can therefore substantially alleviate the issue regarding adequate for old-age provision. ◆

Publications and Presentations

ICIR Working Papers

- Gründl, Helmut, Weinert, Jan-Hendrik
The Modern Tontine: An Innovative Instrument for Longevity Risk Management in an Aging Society
ICIR Working Paper 22/2016
- Weinert, Jan-Hendrik
The Fair Surrender Value of a Tontine
ICIR Working Paper (forthcoming)

Academic Conferences

- December 12–13, 2016
LMU Munich, Germany
CEAR/MRIC Behavioral Insurance Workshop 2016
The Modern Tontine: An Innovative Instrument for Longevity Risk Management in an Aging Society
Gründl, H., Weinert, J.-H.
- November 10–12, 2016
University of Augsburg, Germany
Tontines and the History of Insurance Law
Weinert, J., Tontines in Europe Today
- 19–21 September 2016
Limassol, Cyprus
43rd Seminar of European Group of Risk and Insurance Economists (EGRIE)
The Modern Tontine: An Innovative Instrument for Longevity Risk Management in an Aging Society
Gründl, H., Weinert, J.-H.
- March 10–11, 2016
Vienna, Austria
Annual Congress of the German Insurance Science Association (DVfVW) 2016
The Modern Tontine: An Innovative Instrument for Longevity Risk Management in an Aging Society
Gründl, H., Weinert, J.-H.

Insurance in the Digital Age: Consumers' Transparency Aversion and Market Equilibria

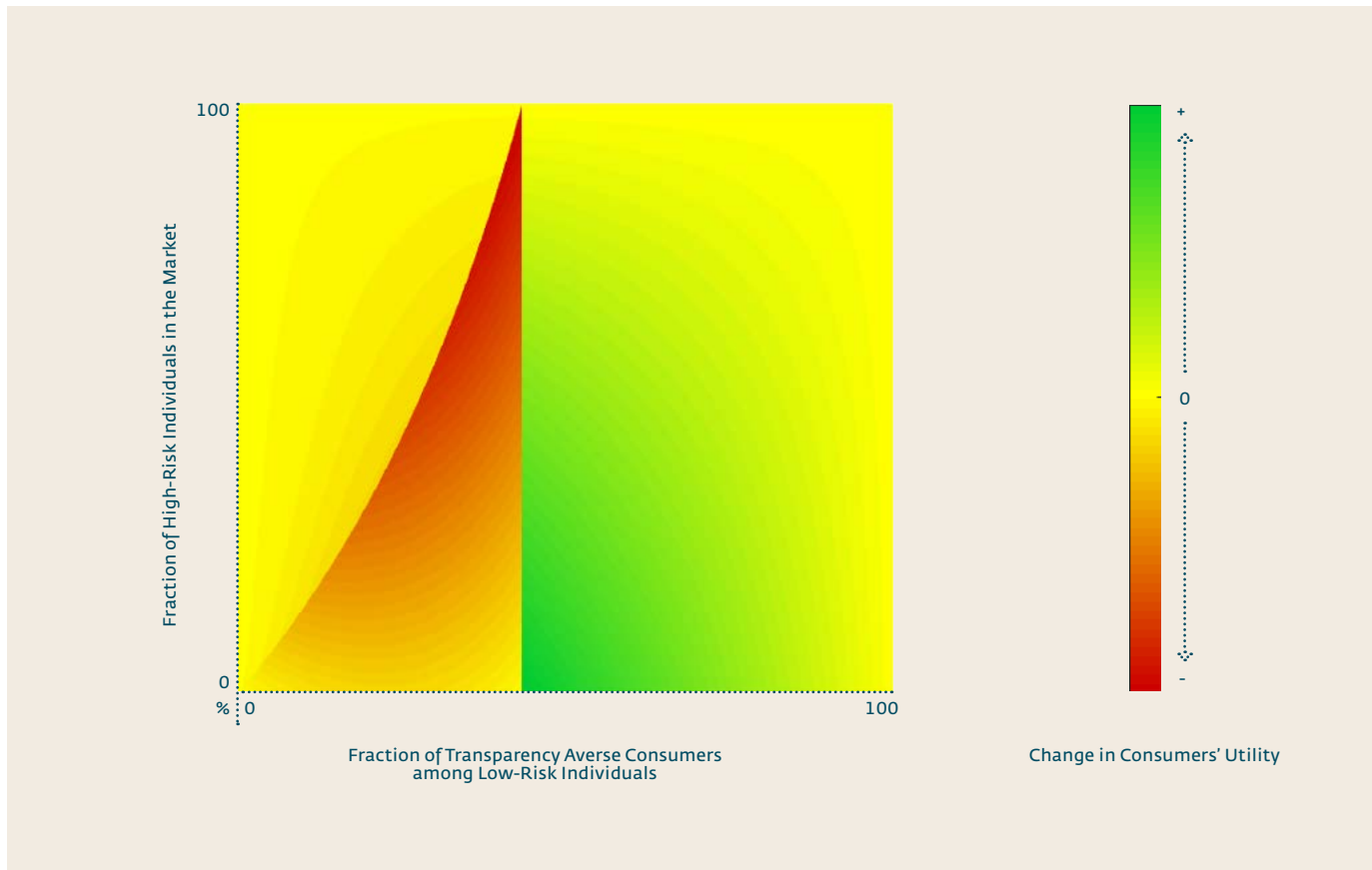


Figure 1: Change in Social Welfare Due to the Availability of a Fairly Priced Full Coverage Insurance Policy that Requires the Revelation of Private Information

Telemonitoring devices, such as wearables in health insurance or telematics systems in car insurance, can be used to screen consumers' characteristics and mitigate inefficient information asymmetries that lead to adverse selection in insurance markets. However, consumers value their privacy and may dislike sharing private information with insurers. In this context, the effect of digitalization on social welfare is ambiguous.

What is Transparency Aversion?

With the ongoing process of digitalization, new technologies are being used to acquire, store and manage more information about consumers, aiming to price insurance policies more accurately and to adjust the underwriting ▶



➤ Irina Gemmo

➤ Mark J. Browne

➤ Helmut Gründl

1
Wilson, C. (1977). A model of insurance markets with incomplete information. *Journal of Economic Theory*, 16(2):167–207.

reserves for each policy according to the respective risk. However, as the public discussion about consumer protection shows, some consumers value their privacy and do not feel comfortable sharing too much information with public institutions or companies, such as insurers. They exhibit a disutility from transparency or - in other words - a transparency aversion. The degree of this transparency aversion might differ among consumers but does not necessarily depend on their risk type. It is rather correlated with their valuation of privacy, view on digitalization, cyber security, trust in companies and public institutions with respect to data abuse and related experience, and even their political orientation, e.g. views on consumer rights. The disutility a consumer might face when revealing private information might outweigh the utility increase from a potential premium reduction or higher coverage.

The Option to be a Transparent Consumer

In our analysis, we consider an insurance market with asymmetric information consisting of risk neutral, nonmyopic insurers that operate in a competitive market environment and risk averse consumers who differ in their risk type and transparency aversion.

In our framework, consumers can choose between the standard equilibrium insurance contracts introduced by Wilson (1977)¹, where low risks forgo utility due to

high premiums or low coverage, and an insurance policy that offers full coverage at a fair premium. Due to asymmetric information, the latter contract can only be offered conditional on the revelation of private information. We therefore refer to this contract as the transparency contract. We assume that policyholders' utility from an insurance policy is not only determined by the monetary wealth, but also takes into account the individuals' valuation of privacy. Individuals decide whether to purchase insurance and which policy they prefer by trading off the utility of monetary wealth against the disutility from sharing private information. We show analytically how the introduction of a new insurance policy that offers full insurance at a fair price, but is only offered conditional on the revelation of private information affects the standard Wilsonian insurance market equilibria as well as social welfare.

One Person's Loss is Another Person's Gain

The Wilsonian standard insurance market equilibrium outcomes depend on the fraction of high-risk individuals. If this fraction exceeds a critical value, a pooling contract priced at the average risk does not attract low-risk consumers and therefore the market equilibrium is described by two self-selecting separating contracts.

Hence, the impact the availability of a transparency contract has on social welfare is ambiguous and

depends on the composition of individuals in the market, with respect to their risk type and transparency aversion (see Figure 1).

Our analysis shows that offering an insurance policy conditional on the revelation of private information can substitute deductibles for consumers, whose aversion to share private information is sufficiently low, and lead to a Pareto improvement of social welfare. This situation is illustrated by the rectangle on the right side of the heat diagram (the green and yellow shaded area). However, if all individuals are offered the same insurance contract that is priced at the average risk, consumers who exhibit a transparency aversion and high-risk individuals can be worse off. In this case, utility is shifted from individuals who choose not to reveal their private information to those who choose to reveal.

The overall welfare loss is highest when the initial fraction of high risks in the market is just falling short of the pivotal fraction and the share of transparency averse low-risk individuals is relatively high. This situation corresponds to an initial pooling equilibrium that is turned into a separating equilibrium by the introduction of the transparency contract. The most pronounced case of this situation is represented by the red shaded area in the heat diagram. ♦

Research Insurance Economics and Law Published Articles

Höring, D., Gründl, H., Schlütter, S. (2016)

Impediment of Communication in Financial Institutions: Implications for the Risk Management Organization

The Geneva Risk and Insurance Review,
DOI: 10.1057/s10713-016-0015-y.

Zimmer, A., Gründl, H., Schade, C. D., Glenzer, F. (2016)
An Incentive-Compatible Experiment on Probabilistic Insurance and Implications for an Insurer's Solvency Level

Journal of Risk and Insurance, DOI: 10.1111/jori.12148.

Gal, J. (2016)

Rechtsschutz gegen die Leitlinien der EIOPA

Koch, Robert (Hrsg.), 100 Jahre Seminar für Versicherungswissenschaft und Versicherungswissenschaftlicher Verein in Hamburg e.V. (in print).

Gal, J. (2016)

Die Berechnung des Personenschadens in Deutschland – Ein grober Überblick = Almanya'da Kişisel Yaralanmalar – Sirasında Oluşan Zararın Hesabi

Türkiye Barolar Birliği (Hg.), Yeni Gelişmeler Işığında: Bedensel Zararların Tazmini –Uluslararası Kongre, Bd. 2, Ankara 2016, S. 463–483 = S. 443–461.

Gal, J. (2016)

§§ 1–7 VVG- InfoV

Römer, Wolfgang/Langheid, Theo (Hrsg.), VVG-Kommentar, 5. Auflage, München 2016.

Gal, J. (2016)

Artt. 1–7 EGVVG

Römer, Wolfgang/Langheid, Theo (Hrsg.), VVG-Kommentar, 5. Auflage, München 2016.

Gal, J. (2016)

„Schiedsgerichtsbarkeit und Versicherung“

Langheid/Wandt (Hrsg.), MünchKommVVG, 2. Auflage, ca. 120 Seiten.

Fischer, K., Schlütter, S. (2015)

Optimal Investment Strategies for Insurance Companies when Capital Requirements are imposed by a Standard Formula

The Geneva Risk and Insurance Review, Vol. 40, No. 1, S. 15 – 40.

➤ ICIR Research Publications

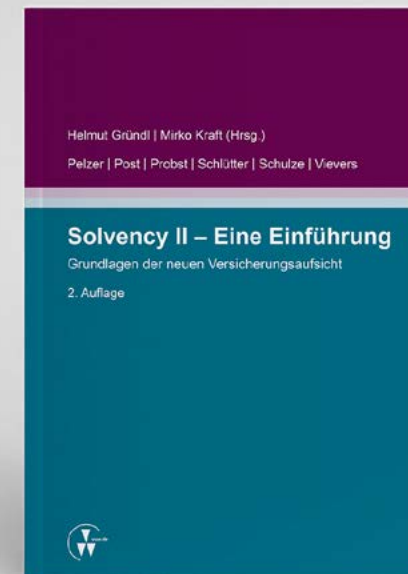
Publications Books

Solvency II - Eine Einführung

Grundlagen der neuen Versicherungsaufsicht
2. Auflage

Prof. Dr. Helmut Gründl,
Prof. Dr. Mirko Kraft (Hrsg.)

September 2016



Research Insurance Law Published Articles Prof. Dr. Manfred Wandt

➤ Prof. Dr. Manfred Wandt

➤ Institut für Versicherungsrecht (IVersR)

Books

Gesetzliche Schuldverhältnisse
7. Aufl. 2015, S. 548.

Versicherungsrecht
6. Aufl. 2016, S. 621.

Commentations

Kommentierungen der §§ 28 bis 32 VVG in:
Langheid/Wandt, Münchener Kommentar zum
Versicherungsvertragsrecht
Bd.1, 2. Aufl. 2015, S. 692–927.

Art. 2:603 Alteration of Terms and Conditions
(M. Wandt), in Principles of European Insurance
Contract Law PEICL (Basedow u.a.eds.)
2015, p.170–173.

Art. 2:701 General Information Duty (M. Wandt),
in Principles of European Insurance Contract Law
PEICL (Basedow u.a.eds.)
2015, p.176–179.

Art. 2:702 Further Information upon Request
(Wandt), in Principles of European Insurance
Contract Law PEICL (Basedow u.a. eds.)
2015, p.180–181.

Art.17:303 Adjustment of Premium and Benefits
Payable (M. Wandt), in Principles of European
Insurance Contract Law PEICL (Basedow u.a. eds.)
2015, p. 333–337.

Art.17:304 Alteration of Terms and Conditions
(M. Wandt), in Principles of European Insurance
Contract Law PEICL (Basedow u.a. eds.)
2015, p. 337–340.

Art.18:302 Group Insurance - Alteration of Terms
and Conditions (M. Wandt), in Principles of European
Insurance Contract Law PEICL (Basedow u.a.eds.)
2015, p. 365.

Contributions in Collected Editions

Prämien- und Bedingungsänderungen in laufenden
Versicherungsverträgen, in: Beckmann/
Matusche-Beckmann, Versicherungsrechts-Hdb
3. Aufl., 2015, S. 643–691.

Allgemeines Versicherungsvertragsrecht in:
Halm/Engelbrecht/Krahe (Hrsg), Handbuch des
Fachanwalts Versicherungsrecht
5. Aufl. 2015, S.1–273.

Essays

Masterplan für die Lebensversicherung? - Vertrags-
rechtliche Prämienanpassungsbefugnis nach
Paragraph 163 VVG stößt im wissenschaftlichen
Diskurs auf Kritik
VW 12/2015, 30–31.

Zur dogmatisch gebotenen Enthüllung von "verhüllten"
Obliegenheiten - Zugleich Anmerkung zum Urteil
des OLG Naumburg vom 28.3.2014 (10 U 5/13 (HS))
VersR 2015, 102 -VersR 2015, 265–269.

Prämienanpassung in der Lebensversicherung zum
Ausgleich niedriger Kapitalerträge des Versicherers?
VersR 2015, 918–926.

Decision Recensions

Anm. zu BGH, 22.9.2014, (IV ZR 371/13) Zu den
Anforderungen an die Revisionsbegründung zum
Belehrungserfordernis nach § 28 Abs. 4 VVG bei einer
Obliegenheit zur Stehlgutlistenvorlage bei der Polizei
VersR 2015, 1122–1124.

Anm. zu OLG Naumburg, 28.3.2014 (10 U 5/13
(HS)) - Zur dogmatisch gebotenen Enthüllung von
"verhüllten" Obliegenheiten
VersR 2015, 265–269.

Research Academic Conferences



March 10–11, 2016
Vienna, Austria

Annual Congress of the German Insurance Science Association (DVfVW) 2016

Life Insurance in an Ageing Society: An Empirical Analysis of Surrender Decisions

Irina Gemmo, Martin Götz, Helmut Gründl

The Modern Tontine: An Innovative Instrument for Longevity Risk Management in an Aging Society

Jan-Hendrik Weinert, Helmut Gründl

Escaping the Guarantee Trap

Christian Kubitzka, Tobias Niedrig

April 8, 2016
Zurich, Switzerland

Annual Conference of the Swiss Society for Financial Market Research

Escaping the Guarantee Trap

Christian Kubitzka, Tobias Niedrig

August 7, 2016
Boston, MA, USA

2016 S.S. Huebner Foundation Doctoral Colloquium

Systemic Risk in the Insurance, Banking, Brokerage and Non-Financial Sectors: Time-Lags and Persistence

Christian Kubitzka

August 7–10, 2016
Cambridge, MA, USA

2016 Annual Meeting of the American Risk and Insurance Association (ARIA)

Systemic Risk in the Insurance, Banking, Brokerage and Non-Financial Sectors: Time-Lags and Persistence

Christian Kubitzka, Helmut Gründl

Life Insurance and Demographic Change: An Empirical Analysis of Surrender Decisions Based on Panel Data

Irina Gemmo, Martin Götz, Helmut Gründl

September 19–21, 2016

Limassol, Cyprus

4³rd Seminar of European Group of Risk and Insurance Economists (EGRIE)

Systemic Risk: Time-Lags and Persistence

Christian Kubitzka, Helmut Gründl

The Modern Tontine: An Innovative Instrument for Longevity Risk Management in an Aging Society

Jan-Hendrik Weinert, Helmut Gründl

September 30–October 1, 2016
Bonn, Germany

23rd Annual Meeting of the German Finance Association (DGF)

The Auto- and Cross-Dependence of Tail Returns, and Implications for Systemic Risk

Christian Kubitzka, Helmut Gründl

November 10–12, 2016

Augsburg, Germany

Tontines and the History of Insurance Law

Tontines in Europe Today

Jan-Hendrik Weinert

December 12–13, 2016

Munich, Germany

CEAR/MRIC Behavioral Insurance Workshop 2016

The Modern Tontine: An Innovative Instrument for Longevity Risk Management in an Aging Society

Jan-Hendrik Weinert, Helmut Gründl

Research Academic Exchange Visitors



June 27–July 8, 2016

Professor Mark J. Browne

Ph. D., Professor at the School of Risk Management, Insurance and Actuarial Science, St. John's University, New York

Presentations at the ICIR and House of Finance
Risk Attitudes, Family Transitions and the Economy

Does National Flood Insurance Program Participation Induce Housing Development



November 8–9, 2016

Professor Moshe A. Milevsky

Finance Professor at the Schulich School of Business at York University in Toronto, Canada

Presentation at the ICIR and House of Finance
Optimal Retirement Spending and Insurance – When Biological Age and Chronological Age Differ

Research Academic Exchange Berkley Fellowship for Irina Gemmo



"I had the pleasure to be invited to the School of Risk Management (SRM) of St. John's University in New York City. Together with SRM chair Prof. Mark J. Browne, Ph.D., I was working on our research project on Transparency Aversion and Insurance Market Equilibria.

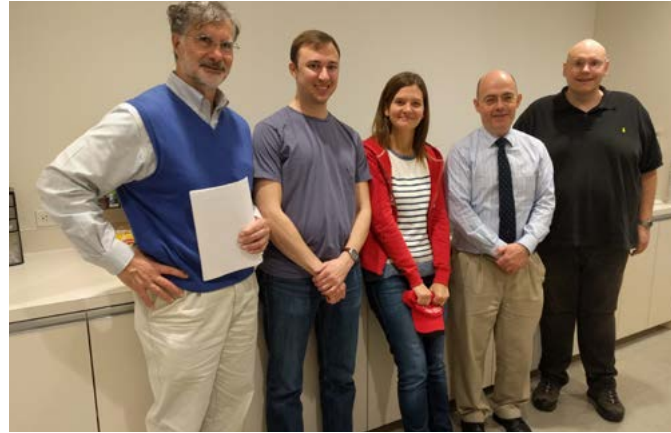
The School of Risk Management, Insurance and Actuarial Science is part of the Tobin College of Business at St. John's University. Located in Manhattan, New York City, it is a global leader in risk and insurance education, drawing candidates from all over the world.

As a Berkley Fellow, I spent September and October 2016 at the SRM working on a research project to investigate how far consumers' aversion towards sharing private information with insurers affects insurance market equilibria in the digital age. At St. John's, I felt truly welcomed and included and the SRM faculty was friendly and helpful in any situation. I personally appreciated most the numerous talks with faculty members, as well as the constructive feedback and valuable input on our project that I received during my academic presentation at one of the faculty's research seminars.

Overall, I had a great time in New York, where I did not only enjoy the nice and encouraging atmosphere at SRM, but also had the chance to experience the vibrant city and its many cultural activities. I am very grateful to the School of Risk Management at St. John's University, in particular to its chair, Prof. Mark J. Browne, Ph.D., as well as to my supervisor, Prof. Dr. Helmut Gründl, for enabling it and making my stay in New York City an amazing and enriching experience." Irina Gemmo ♦

➤ Irina Gemmo

➤ St. John's University, The School of Risk Management, Insurance and Actuarial Science



Policy Platform People. Positions. Presentations.





Systemic Risk in the Insurance Industry Models, Measures and Reality



Systemic risk in the insurance industry is gaining more and more attention as the systemic relevance of insurance companies is increasingly causing controversial debates in the academic literature and policy sphere.

The ICIR-SAFE workshop has addressed the systemic risk topic by shedding light on the most relevant issues: What does systemic relevance in the insurance context mean? How can systemic relevance be adequately measured? Can primary insurers or reinsurers be systemically relevant? The idea of the workshop was to tackle these issues by triggering thought-provoking discussions and by raising awareness for the different perspectives of the stakeholders involved. To this end, the workshop has served as a platform to host a high-level discussion between international regulatory institutions, policy makers, industry and academics.

The first day of the workshop focused on the policy dimension of systemic risk in insurance, with strong interaction between regulatory and supervisory institutions and the industry. Institutions such as the International Monetary Fund (IMF), the International Association of Insurance Supervisors (IAIS), the European Insurance and Occupational Pensions Authority (EIOPA), the European Central Bank (ECB), the European Systemic Risk Board (ESRB), the German Federal Financial Supervisory Authority (BaFin) and the Deutsche Bundesbank contributed to the

discussion. In addition, executives from leading insurance companies such as Allianz, AXA and Munich Re, and from Insurance Europe and the German Insurance Association (GDV) gave an insight into the industry perspective. The second day of the workshop was devoted to a research meeting that discussed high-quality research findings on systemic risk topics.

Summary of the Policy Day

The first panel, "The Global Regulatory Perspective on Systemic Risk in the Insurance Industry", focused on the question whether regulators are doing too much or too little regarding systemic risk in the insurance sector. It was argued that the generally high level of interconnectedness of the insurance business seems to make systemic relevance possible. Measuring systemic risk only by means of an entity-based approach, i.e. to evaluate each insurance company's systemic relevance at its firm-level, and finally to generate a list of globally relevant institutions, does not sufficiently reflect the systemic risk potential in the insurance sector. In this context, the role of the "collective behavior", i.e. the common exposures within the insurance industry due to joint actions of the firms, e.g. fire sales of assets, and their general destabilizing potential, was stressed. To improve the regulatory approach to systemic risk in the insurance sector, the suggestion was to supplement the current entity-based approach by an activity-based

approach that would incorporate the effects of insurers' common business activities with regard to systemic risk. This approach might help to detect and reduce the insurance sector's potential for posing systemic risk.

Regarding the appropriateness of the current approach for determining global systemically important insurers, the IAIS indicator-based model and its different underlying steps and phases were explained thoroughly. Although the approach is particularly similar to that of the banking sector, it was stressed that it is still able to take the special characteristics of the insurance business model into account by means of several unique indicators only aligned to the insurance business. Therefore, the fundamental differences between the banking business model and the insurance business model, and through these the insurance sector's general importance for financial stability, have been emphasized.

Considering the insurance sector's quantifiable contribution to systemic risk, the academic side reveals that the insurance sector contributes significantly to systemic risk, albeit at a generally lower level than banks. One of the main drivers for the sector's systemic importance can be found in increasing common exposures that are not related to just similar investment and liability portfolio allocations of insurance companies, but are rather caused by duration mismatches and changing market dynamics. ▶

Implications for supervisory activities are to focus on a more macro-prudential approach to the sector for the adequate treatment of systemic risk and to pay more attention to smaller insurance companies as well.

Overall, the panel revealed that the current regulatory approaches are not comprehensive enough to cover all the different dimensions of systemic risk in the insurance sector, especially from a global perspective. The discussants reached a consensus about the need for a more sector-wide approach to cope with the insurance companies' contribution to systemic risk, but its exact design, despite the different recommendation of the discussants, remained open in the end.

The second panel, "The Industry Perspective", focused on connecting existing frameworks and measures of systemic risk to the business model of insurers. Several achievements in the process of macro-prudential supervision were acknowledged. These included the identification of potential risks with regard to liquidity needs and spillover effects by means of the systemic risk monitoring report (SRMP) and liquidity risk management plan (LRMP).

However, the discussants also identified a number of shortcomings in the current supervisory framework. In particular, the main differences between the insurance

and banking business models were stressed, namely that insurers do not drive credit cycles and they rely on a liability-driven investment approach. Thus, it was pled that the current and future regulation should not copy existing banking regulation, but rather take the specificity of the insurance sector into account.

Regarding the measurement of systemic risk in the insurance sector, the discussants clarified a number of critical issues: Since current regulation does not differentiate between different degrees of systemic riskiness to a large extent, systemic importance is more based on a black-or-white decision, while it should rather include a ranking according to the extent of systemic risk. Likewise, many academic approaches miss a lower bound of systemic risk that decides whether an institution is systemically important or not.

The panel discussion also revealed a number of questions that do not seem to be answered at the moment, but remain as promising topics for future debates. These include, for instance: "Can there also be a non-activity that is systemically important?" and: "At which point are externalities of insurers' decisions systemic?"

The third panel, "The European Regulatory Perspective", addressed the importance of liquidity and macro-economic risks as potential drivers for systemic risk in the

insurance industry. It was stressed that liquidity risk has complex, intertwined linkages and interrelations. For example, in the life insurance context the combination of the size of surrender values and the potential charges for contract termination may result in different scenarios of possible mass lapses in life insurance. The resulting effects need to be understood thoroughly. Furthermore, the development of a comprehensive global risk-based solvency regime that includes macro-prudential risk measures within the International Capital Standard would be a valuable evolution of the regulatory frameworks.

Regarding the current regulatory framework for EU-insurers, Solvency II, its link to systemic risk was emphasized by the consequences of the current Ultimate Forward rate (UFR) level for determining the value of technical provisions. The discussants came to the conclusion that the incentive and solvency effects stemming from a gap between the interest rate values based on the UFR and the "true" interest rate level must be carefully analyzed. However, it was also argued that the UFR issue seems to be less important compared to other distortions under Solvency II, especially disregarding credit risk for European sovereign bonds in the first pillar.

The panel closed with a thought-provoking statement from the supervisory side: "Market valuation is like democracy. It is not perfect but it is the best we can do." ♦

Program: November 16, 2016

Stakeholder Perspectives on Systemic Risk in Insurance

15:30 – 16:00

Reception

16:00 – 16:15

Welcome Address

Helmut Gründl (Chair of Insurance and Regulation, ICIR, Goethe University)

16:15 – 17:15

The Global Regulatory Perspective

Systemic Risk in the Insurance Industry – Are We Doing too Much or too Little?

Felix Hufeld (President, BaFin)

Criteria for Systemic Risk-Labels

Catherine Lezon (Deputy Secretary-General, International Association of Insurance Supervisors)

Panel: Thomas C. Wilson (CRO, Allianz SE), Gaston Gelos (Division Chief of the Global Financial Stability Analysis Division, International Monetary Fund)

Moderation: Raj Singh (CRO, Standard Life UK)

17:30 – 18:30

The Industry Perspective

Systemic Risk Measures and the Insurance Business Model

Christian Thimann (Member of the Executive Committee, Group Head of Strategy, Sustainability and Public Affairs, AXA Group)

Measuring Systemic Risk – Squaring the Circle?

Michael Menhart (Chief Economist, Munich Re)

Panel: Frank Grund (Chief Executive Director of Insurance and Pension Funds Supervision, BaFin), Karel Van Hulle (Honorary Professor, ICIR, Goethe University), Kamil Yilmaz (Professor of Economics, Koç University)

Moderation: Jan Pieter Krahen (Chair of Corporate Finance, Goethe University and SAFE Director, Research)

18:45 – 19:45

The European Regulatory Perspective

Consistent Management of Systemic and Solvency Risks

Gabriel Bernardino (Chairman, EIOPA), Francesco Mazzaferro (Head of the Secretariat of the European Systemic Risk Board)

Panel: Olav Jones (Deputy Director General & Director Economics and Finance, Insurance Europe), Lorian Pelizzon (SAFE Chair of Law and Finance, Goethe University), Axel Wehling (Member of the Board of Directors, German Insurance Association (GDV))

Moderation: Helmut Gründl (Chair of Insurance and Regulation, ICIR, Goethe University)

20:00

Dinner

Program: November 17, 2016

Research Meeting on Systemic Risk in Insurance

Academic Presentations and Discussions

<p>8:15 – 8:30 Welcome Address</p>	<p>11:20 – 12:10 Measuring Systemic Risk of Insurance Companies Viral V. Acharya (NYU Stern School of Business) Discussion: Christian Thimann (AXA Group and LSE Systemic Risk Centre)</p>	<p>15:10 – 15:30 Coffee Break</p>
<p>8:30 – 9:20* CoRisk: Measuring Bail-In Systemic Risk Through Default Probability Contagion Paolo Giudici (University of Pavia), Laura Parisi (University of Pavia and NYU Stern School of Business) Discussion: Christian Kubitzka (ICIR, Goethe University)</p>	<p>12:10 – 13:30 Lunch</p>	<p>15:30 – 16:20 The Value and the Price of a “too-big-to-fail” Guarantee: Evidence from the Insurance Industry Paolo Zanghieri (Generali and University of Bologna) Discussion: Andrea Paltrinieri (University of Udine)</p>
<p>9:20 – 10:10 Volatility Connectedness and Systemic Risk in the Insurance Industry Kamil Yilmaz, Mehmet Karaca (Koç University) Discussion: Loriana Pelizzon (SAFE, Goethe University)</p>	<p>13:30 – 14:20 Portfolio Similarity and Asset Liquidation in the Insurance Industry Loriana Pelizzon (SAFE, Goethe University), Mila Getmansky (University of Massachusetts), Giulio Girardi (U.S. Securities and Exchange Commission), Kathleen Hanley (Lehigh University), Stanislava Nikolova (University of Nebraska-Lincoln) Discussion: Mathieu Vital (Financial Stability Strategy and Risk, Bank of England)</p>	<p>16:20 – 17:10 Bank-Insurance Spillovers: Evidence from Europe Andrea Paltrinieri, Stefano Miani, Alex Scip (University of Udine), Alberto Dreassi (University of Trieste) Discussion: Mirko Kraft (Hochschule Coburg)</p>
<p>10:10 – 10:30 Coffee Break</p>	<p>14:20 – 15:10 The Impact of Regulation on UK Insurers’ Investment Behaviour – a Structural Approach Graeme Douglas (Financial Stability Strategy and Risk, Bank of England) Discussion: Paolo Zanghieri (Generali and University of Bologna)</p>	<p>17:10 – 17:30 Summary and Closing Remarks</p>
<p>10:30 – 11:20 Spillover Duration of Stock Returns and Systemic Risk Christian Kubitzka, Helmut Gründl (ICIR, Goethe University) Discussion: Paolo Giudici (University of Pavia)</p>		<p>17:30 End of Research Meeting</p>



From Solvency II to Solvency III?



Since 1 January 2016 some 4000 insurance and reinsurance firms in the EU apply the new risk based solvency capital regime, called Solvency II. The new regime has not been applied yet for a year and there is already pressure for change. Are we on our way towards Solvency III?

It took about 15 years to develop Solvency II. Although this might appear a long period of time, one should not forget that the introduction of a risk based solvency capital regime constitutes the biggest reform in insurance regulation in the EU since thirty years.

Many stakeholders have been actively involved in the development of Solvency II. The regulatory process was bottom-up rather than top-down. The active engagement of so many people and experts throughout the process has no doubt helped to smooth the transition from Solvency I to Solvency II. ▶

Solvency II establishes a link between risk and capital. This will lead to a more professional way of conducting insurance business. From the conception of the insurance product, through the sales process and the claims handling, insurers will have to be mindful about the capital consequences of the risks that they are taking.

A crucial element of the reform is the dialogue which is established between the supervisory authority and the supervised entity. This dialogue is enshrined in Solvency II through the supervisory review process which automatically starts when an insurer breaches the Solvency Capital Requirement (SCR). It is also present in the discussion between the supervisory authority and the supervised entity about the Own Risk and Solvency Assessment (ORSA) which must be carried out by the insurer at least once a year. This dialogue should not be a monologue. Both parties will have to learn to discuss solvency issues based upon a relationship of trust.

Solvency II comprises four levels of regulation: the Solvency II Framework Directive¹ (level 1), the Delegated Regulation from the European Commission² (level 2), the Regulatory and Implementing Technical Standards developed by EIOPA (level 3) and the (non-legally binding) Guidelines developed by EIOPA (level 4). The total regulatory package now comprises too many pages. This is clearly not in line with the principles based approach that

1 Directive 2009/138/EC of the European Parliament and of the Council of 25 November 2009 on the taking-up and pursuit of the business of insurance and reinsurance, OJ L 335, 17.12.2009, p. 1.

2 Commission Delegated Regulation (EU) 2015/35 of 10 October 2014 supplementing Directive 2009/138/EC of the European Parliament and of the Council on the taking-up and pursuit of the business of insurance and reinsurance, OJ L 12, 17.1.2015, p. 1.

3 Commission Delegated Regulation (EU) 2016/467 of 30 September 2015 amending Commission Delegated Regulation (EU) 2015/35 concerning the calculation of regulatory capital requirements for several categories of assets held by insurance and reinsurance undertakings, OJ L 85, 1.4.2016, p. 6.

was one of the objectives of Solvency II. Neither insurers, nor insurance supervisors will be able to monitor in detail all the rules that make up Solvency II. This is not a problem in itself. It is crucial that from day one both insurers and insurance supervisors concentrate on the important issues and that they apply the principle of substance over form. It is equally important that national legislators as well as insurance supervisors avoid introducing further rules at national level (gold plating). This will require some discipline: not all problems can or should be resolved. Some experimentation is unavoidable and is good. From applying the rules in practice, all parties concerned will learn where the strengths and the weaknesses in the new regime can be found.

It appears that in most Member States, the introduction of Solvency II went rather smoothly. Of course, not everything goes well from day one. That cannot be expected. Important regulatory reforms take time to bed down in daily practice. One should therefore be cautious not to amend the regime before sufficient experience has been gained. Solvency II was designed as a flexible regime which can be adapted when needed in order to bring the rules in line with changed circumstances. There is however pressure already now to change the regime. Changes should only be carried out after careful study and a thorough impact assessment.

4 EIOPA, Final Report on Consultation Paper no. 15/004 on the Call for Advice from the EC on the identification and calibration of infrastructure investment risk categories, EIOPA-BoS-15-223, 29 September 2015, 194 p.

5 Directive 2014/51/EU of the European Parliament and of the Council of 16 April 2014 amending Directives 2003/71/EC and 2009/138/EC and Regulations (EC) No 1060/2009, (EU) No 1094/2010 and (EU) No 1095/2010 in respect of the powers of the European Supervisory Authority (European Insurance and Occupational Pensions Authority) and the European Supervisory Authority (European Securities and Markets Authority), OJ L 153, 22.5.2014, p.1

A first amendment of the Delegated Regulation already took place on 2 April 2016³. There are always good reasons to have a second go at a legal text. Even though one cannot possibly argue that Solvency II has not been properly prepared and consulted about, there are always new developments which make people look differently at what has been agreed. In a low interest rate environment, insurers have difficulties in finding good investment opportunities. On the other hand, governments are interested in finding institutional investors which are prepared to invest in infrastructure projects particularly at times when interest rates are low and economic growth must be stimulated. The amendment of the Delegated Regulation therefore introduces a new investment category “qualifying infrastructure investments” with an adapted calibration. Following the advice from EIOPA⁴, using this investment category requires insurers to apply specific risk management measures. Although this makes the standard formula more complicated, a more granular approach can certainly be justified if the risks are properly calculated.

There is a risk that political authorities and the insurance industry will exercise pressure for further rapid changes of the new solvency regime.

Recital 60 in the Preamble to Omnibus II⁵ states the following concerning the review of Solvency II: “In order to ▶

ensure that the Union's objective of long-term sustainable growth and the objectives of Directive 2009/138/EC of primarily protecting policyholders and also ensuring financial stability, continue to be met, the Commission should review the appropriateness of the methods, assumptions and standard parameters used when calculating the standard formula for the SCR within five years of the application of Directive 2009/138/EC."

Not even one year later, recital 60 in the Preamble to the EC's Delegated Regulation states that a review of the standard formula should take place before December 2018, i.e. two years after the application of Solvency II. The EC justifies this early review by referring to "the experience gained by insurance and reinsurance undertakings during the transitional period and the first years of application of these delegated acts."

On 18 July 2016, the EC sent a formal request to EIOPA for technical advice on possible amendments of the implementing measures of Solvency II⁶. The request takes into account the feedback received by the EC on its call for evidence on the EU regulatory framework for financial services, launched on 30 September 2015. The areas which EIOPA should look into and on which it is asked to report back to the EC by 31 October 2017 include: proportionate and simplified application of the requirements, removal of unintended technical

inconsistencies and removal of unjustified constraints to financing. The EC lists a series of specific issues which EIOPA has to look at for the first two areas. As for unjustified constraints to financing, the EC is still in the process of conducting an in-depth assessment of investment classes that merit further investigation. The idea is to identify those investments which create growth and jobs and that offer sufficient transparency and credit quality to justify a lower calibration in the standard formula. The EC might request EIOPA's technical support for this at a later stage.

In its response letter to the EC, dated 13 October 2016⁷, EIOPA explains how it intends to prepare its advice. It should be welcomed that EIOPA proposes to proceed on the basis of reported data and that it intends to ensure a thorough involvement and consultation of stakeholders even if this would result in the final advice to be delivered by end February 2018 rather than by 31 October 2017 as requested by the EC. That date was indeed unrealistic and a respect of that deadline would not allow EIOPA to deliver evidence based advice.

The next review, which will deal with the Framework Directive, is scheduled for 2021. That review will include the treatment of long-term guarantees and will take stock of the experience gathered with the application of the long-term guarantee package introduced by Omnibus II.

6

The letter to EIOPA including an attachment with specific requests for advice is published on the EC's website (<http://ec.europa.eu/dgs/finance/>).

7

The letter from EIOPA is published on its website (<https://eiopa.europa.eu/>).

It is unclear whether at that time it will be possible to also benefit from progress achieved at the international level in the context of the development of an international capital standard for insurance.

A regular review of the new solvency regime was part of the design of Solvency II. It is the reason why the Framework Directive of 2009 is principles based and is further implemented by measures at levels 2 to 4. The principles included in the Directive should only be touched with great care. There is no need to move from Solvency II to Solvency III.

Many countries in the world are looking at the experience which the EU has gained with the development of Solvency II. Much can indeed be learned from the in-depth analyses that have been carried out and from the sometimes difficult negotiations that have taken place. This does not mean that Solvency II is a perfect regime or that it is the best solvency regime in the world. It is however a regime that came about after much reflection and debate. It is therefore in the interest of any country in the world that wants to move its solvency regime in the direction of a risk based capital solvency regime to learn from the experience with the development of Solvency II. ♦

Walking the Plank

EIOPA's Guidelines Within the European System of Financial Supervision



The reinforcement of European integration in the field of financial supervision has brought about the advent of a rather novel regulatory tool. All European (Financial) Supervisory Authorities (ESA) – amongst which the European Insurance and Occupational Pensions Authority (EIOPA) – have been granted the power to issue guidelines.

Whilst it appears to be common wisdom that these guidelines have no binding effect (*sensu stricto*), it remains unclear what their legal nature might be. In view of the rather prolific use of this instrument by EIOPA, it seems *de rigueur* to establish the legal limits that EIOPA is subject to when issuing guidelines, their legal effects and possibilities of legal redress. ▶

Difference Between Guidelines and Recommendations

Other than guidelines, art. 16 EIOPA-Reg. equally empowers EIOPA to issue recommendations. For the moment, it remains unsettled in how these two instruments differ from each other. The European Securities and Markets Authority (ESMA) – having issued many of its instruments passed under art. 16 ESMA-Reg. (which is verbatim to art. 16 EIOPA-Reg.) under the collective name “guidelines and recommendations”, without differentiating between the two – appears to regard the linguistic pair to form a hendiadys, with the two synonymous terms in conjunction providing for the specific legal instrument of art. 16 ESMA-Reg. Such an understanding is, however, in contradiction to several provisions of the EIOPA Reg. that speak of “guidelines or recommendations” (see e.g. art. 16 [2] phrase 2, [3] subpara. 2 phrase 1, [3] subpara. 3 phrase 1 and 2, [3] subpara. 4 EIOPA Reg.).

Even if they are thus distinct legal instruments, it is unclear via which characteristics guidelines may be distinguished from recommendations. The only reasonable delimitation seems to be based on the level of abstractness and generality. While guidelines are abstract and general legal instruments thus resembling a European material law (without the binding effect, though), recommendations will either be more concrete or more individual in nature thus evoking a European administrative decision.

Competency to Issue Guidelines

EIOPA, as all European bodies, may only act in cases for which it has been empowered. This means that EIOPA may only issue guidelines in such areas for which it has been directly empowered (art. 1 [2] alt. 1 EIOPA Reg.) or which regard the legal acts enumerated by art. 1 (2) alt. 2 EIOPA Reg. Other subjects may only be addressed if they have a certain degree of connectivity to the legal acts enumerated (art. 1 [3] EIOPA Reg.). As can be seen with the Guidelines on Complaints-Handling, an issue

EIOPA, may only act in cases for which it has been empowered.

that was not addressed by either the Solvency Directive or any other European act, EIOPA has adopted a problematically broad approach as to what falls within its purview. Additionally, pursuant to art. 16 (1) EIOPA Reg. EIOPA may issue guidelines only “with a view to establishing consistent, efficient and effective supervisory practices within the ESFS, and to ensuring the common, uniform and consistent application of Union law”. In view that the criteria “establishing supervisory practices” and “ensuring application of Union law”

Further reading:

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

J. Gal, Rechtsschutz gegen die Leitlinien der EIOPA, in: Koch, Robert (ed.), 100 Jahre Seminar für Versicherungswissenschaft und Versicherungs-wissenschaftlicher Verein in Hamburg e.V. (currently in print).

are linked with the conjunction “and”, guidelines may only be issued where both criteria are met cumulatively. Again, EIOPA seems to disagree by explicitly stating that the Guidelines on Complaints-Handling were issued in order to fill an “existing regulatory gap”, thus in the absence of Union law. In essence, EIOPA should refrain from addressing issues that are the prerogative of the European or national legislator and should in the future only apply guidelines where such appears necessary to concretize existing European legislation instead of spearheading new legislation via this legal mechanism.

Legal Effect

Guidelines are not granted binding legal force and as such are neither (quasi-)legislative acts nor administrative decisions *sensu stricto*. Guidelines, however, constitute abstract general specifications made towards the national supervisory authorities (NSAs) and towards the supervised undertakings, which have an increased factual binding force thus approximating them to a material law. In relation to the supervised undertakings, the guidelines will basically take on the form of binding law because they are not addressed to them directly. By informing EIOPA that it intends to comply with the guidelines in question, the national supervisory authority will usually feel (morally) bound to apply the guidelines *vis-à-vis* all market participants without fail. Since almost all insurers adhere to a strategy of avoiding legal proceedings with ▶

the supervisory authority at all costs, to them the guidelines become a legal instrument that has to be regarded as binding.

Legal Redress

The factual power of the guidelines becomes even more pronounced if one considers the virtual lack of legal redress open to insurers (or the NSA) against them. The EIOPA Reg. does not grant the right of appeal against the guidelines (cp. art. 60 EIOPA Reg.). An action for

EIOPA, as all European bodies, may only act in cases for which it has been empowered.

annulment before the ECJ is (usually) equally unavailable, since art. 263 TFEU allows for such actions only against legal instruments with binding legal force. The same is true concerning legal actions before national courts: There the guidelines or the administrative measures passed by the NSA to comply with the guidelines cannot be attacked individually. An insurer would, thus, be forced to wait for an administrative decision to be taken against it, and could only raise the issue of illegality of the guidelines when requesting the annulment of said

administrative decision. Since insurers want to avoid such legal disputes with their national supervisors, it is to be expected that guidelines will hardly ever be scrutinized by the courts. Since the guidelines are issued without the involvement of the legislator and are not tested by the judicial branch, the executive branch, i.e. EIOPA and the NSAs, can factually use guidelines to substitute itself for the legislator.

Resume

Hitherto EIOPA has issued 34 bundles of guidelines (excluding the preparatory guidelines, which have ceased to be effective), adding up to 730 guidelines. On each of these guidelines, EIOPA has received 31 compliance-answers by the Member States and the EEA-States in summa 22,630 answers. Paying heed to this, and to the fact that many of the current guidelines tackled controversial matters, it is rather surprising that the total amount of non-comply-answers does not exceed 21 (!). During the preparatory phase, non-compliance was more common with a statistical average of 4% of the guidelines not being fully complied with by all Member States. Today, the amount of non-compliance with guidelines is below 1%. Insofar guidelines have factually created a more harmonized insurance supervision. Other than the above-mentioned theoretical and democratic concerns, one could ask if such a homogenous approach within the biggest global insurance market that is the EU might not

only reap benefits but also create new problems. Especially, an automatically aligned response to certain regulatory questions by all national supervisors might create an increased systemic risk that would be avoided by leaving the ESAs more leeway to develop diverging approaches. Another possibility would be to grant the market participants more freedom of action. Since the goal of creating a principle-based regime was – at least originally – to foster a more flexible and more individual model of supervision, it would be a good idea not to fill out all

These rules are set by the same actors that are later to enforce these rules.

principles with overly detailed guidelines. Reality looks different: The move away from rule-based law has resulted in an exponential increase of rules in the field of insurance supervision. And these rules – especially in the case of guidelines – are set by the same actors that are later to enforce these rules. This should be enough to make Montesquieu turn in his grave. ♦

A Critical Perspective on the Solvency II Implementation An (Un)level Playing Field in Times of Low Interest Rate

➤ 10th Talk on Insurance and Regulation
June 28, 2016

➤ Download Presentation "A Critical Perspective on the Solvency II Implementation"



Dr. Dieter Wemmer, Member of the Board Management and CFO of Allianz SE, in dialogue with Dr. Frank Grund, Chief Executive Director of Insurance and Pension Funds Supervision of BaFin.

The 10th Talk on Insurance and Regulation event that took place on 28 June 2016 aimed at promoting a dialogue between the insurance industry and insurance supervision on the current issues of Solvency II implementation. Dr. Dieter Wemmer (Allianz SE) outlined a critical perspective on the implementation of Solvency II and its impact on the insurance industry. Following his speech, Dr. Frank Grund (BaFin) commented on the key statements, followed by a general discussion that was moderated by Prof. Dr. Helmut Gründl.

Key discussion topics included the inconsistent application of Solvency II within Europe, adverse implications from the misalignment between Solvency II and local accounting standards as well as related challenges from the low yield environment.

Press Coverage

Börsen-Zeitung, 30. Juni 2016

Solvency II macht die Dinge schwerer
Allianz und BaFin zeigen sich uneins über die Folgen des Regelwerks – Hohe Kosten in der Umsetzung

„Solvency II macht die Dinge schwerer“
Allianz und BaFin zeigen sich uneins über die Folgen des Regelwerks – Hohe Kosten in der Umsetzung

Von Thomas Lutz, Frankfurt

Wiederholung, ja oder? Im Frage- und Antwortgespräch, das am Donnerstagabend in der Frankfurter Börsen-Zeitung stattfand, zeigte sich der Vorstandsvorsitzende der Allianz, Dr. Frank Grund, nicht unzufrieden mit dem neuen Solvency II-Regelwerk. Er sagte, dass die Umsetzung des Regelwerks eine große Herausforderung sei, aber dass die Allianz dies als Chance sehe, um die Qualität der Versicherer zu verbessern. Er sagte auch, dass die Allianz bereit sei, die Kosten der Umsetzung zu tragen, solange dies die Qualität der Versicherer verbessert.

„Solvency II ist ein Kompromiss, der beide Seiten trägt“, sagte der Leiter der BaFin, Dr. Frank König. Er sagte, dass das Regelwerk eine große Herausforderung sei, aber dass es notwendig sei, um die Qualität der Versicherer zu verbessern. Er sagte auch, dass die BaFin bereit sei, die Kosten der Umsetzung zu tragen, solange dies die Qualität der Versicherer verbessert.

Starkpunkt: Staatsbanken
Ein weiterer Kritikpunkt ist die Behandlung von Staatsbanken. Die Allianz fordert eine stärkere Berücksichtigung von Staatsbanken, während die BaFin eine strengere Behandlung fordert.

Gründ gab zu, dass es sich um ein „unwahrscheinliches Szenario“ handelt, wenn es nach IORP geht. Er sagte, dass die Allianz bereit sei, die Kosten der Umsetzung zu tragen, solange dies die Qualität der Versicherer verbessert.



Frankfurter Allgemeine Zeitung (FAZ), 30. Juni 2016
Über das Für und Wider neuer Finanzmarktregeln
Ein Vorstand und ein Aufsichtsrat diskutieren über Solvency II

Über das Für und Wider neuer Finanzmarktregeln
Ein Vorstand und ein Aufsichtsrat diskutieren über Solvency II

Ein Vorstand und ein Aufsichtsrat diskutieren über Solvency II. Die Diskussion dreht sich um die Auswirkungen des neuen Regelwerks auf die Versicherer und die regulatorischen Anforderungen. Die Allianz betont die Notwendigkeit der Umsetzung, während die BaFin die Herausforderungen für die Versicherer hervorhebt.

Die Diskussion dreht sich um die Auswirkungen des neuen Regelwerks auf die Versicherer und die regulatorischen Anforderungen. Die Allianz betont die Notwendigkeit der Umsetzung, während die BaFin die Herausforderungen für die Versicherer hervorhebt.

Community Life

Rethinking Insurance for Times of Digital Change



On the occasion of the 11th Talk on Insurance and Regulation on 20th October 2016, Dr. Claudia Lang presented the background and insights on the topic “Insurance and Digitalization” based on the Community Life business model.

She demonstrated how the value chain in the insurance industry gradually distanced itself from its clients in the past. Dr. Lang sees two main reasons for this: first, the increasing regulatory challenges for the insurers which require an above-average amount of time and resources to overcome thereby restricting free space for market development and clients and causing them to fall out of the companies’ focus. Furthermore, a certain lethargy in the sector as well as an insistence on maintaining a long-standing industry tradition of being offline have contributed to the insurance sector in its current state not being able to satisfy the needs of its modern customers. ▶

Dr. Claudia Lang
Co-Founder and Managing Director,
Community Life

Claudia Lang is one of the founders of Community Life, a novel life insurance model for the German market. The company's approach is a purely online proposition: life insurance made simple and transparent for the digital customer.

Claudia is a Canadian German, who started her career as a securities lawyer working on IPOs as a member of a larger law firm in Toronto, Canada. In 1994,

she moved to the UK where she held various senior management positions in the international life insurance industry, including Head of International Development with the Prudential (UK) Group. She then moved to Dublin in 2000 to join the board of Canada Life Europe and was part of the launch team that established the company as a strong player in Germany's broker market.

Claudia was also Chair of the Association of International Life Offices for several years, a role which involved representational work on behalf of international life insurers. This work gave her insights into the critical views of stakeholders outside of the insurance industry, which ultimately contributed to the idea of launching Community Life as a transparent proposition for the digital customer.

Dr. Lang and her partner Stefan Keck decided to overcome these challenges and rethink insurance by founding Community Life as a solely online insurer, thereby fulfilling their original idea of offering community-orientated insurance again. Dr. Lang sees the reduction in the growing complexity of current insurance products as a main starting point in order to implement digitalization in a strictly customer-oriented manner and to adjust the range of products to cover the essential risks of the clients. In practice, this means that Community Life offers the conditions of its insurance to its customers in a simple

and understandable language, shares with them a common digital customer file and even allows them to participate in the creation of products.

Taking a look at the numerous awards Community Life has received, it seems that not only the customers, but also independent testing institutions are impressed with these new approaches. Through the lively discussion it was apparent that Dr. Lang has encountered great interest in her innovative ideas regarding the insurance value chain. Aside from intriguing questions regarding

the operative risks and the regulatory challenges facing her new business model, it became clear that consistent customer orientation, supported by the possibilities that digitalization offer, will continue to play an essential role in a successful business model. ♦



Policy Platform

Publications, Presentations, Press

November 2015

ECB Financial Stability Review November 2015

Euro Area Insurers and the Low Interest Rate Environment

Prepared by Elia Berdin, Christoffer Kok, Katri Mikkonen, Cosimo Pancaro and Josep Maria Vendrell Simon

December 2015

EIOPA Financial Stability Report 2015

Assessing Systemic Risk of the European Insurance Industry

Elia Berdin, Matteo Sottocornola

February 10, 2016

SAFE Newsletter Q1 2016

"Insurance Activities and Systemic Risk"

Elia Berdin, Matteo Sottocornola

April 2016

IMF Financial Stability Report

Chapter 3 "The Insurance Sector - Trends and Systemic Risk Implications" refers to the ICIR Research of Elia Berdin

"Assessing Systemic Risk of the European Insurance Industry,"

April 2016

Insurance Europe Annual Report 2015-2016

Squaring a Circle

Prof. Karel Van Hulle

September 2016

Appointment of Prof. Dr. Helmut Gründl to the Insurance Advisory Council of the Federal Financial Supervisory Authority (BaFin)

September 2016

„7. Insurance Day“, Institutional Money und Verband der Versicherungsunternehmen Österreichs (VVO), Wien
Solvency II auf dem Prüfstand
Helmut Gründl

October 2016

SAFE "Frankfurt Conference on Financial Market Policy 2016: Challenged by Low Interest Rates"

Moderation of the Panel "Managing Private Portfolios in a Low Return Environment"

Helmut Gründl

November 2016

Interview with „Versicherungswirtschaft heute“

An Solvency II geht kein Unternehmen zu Grunde

Wolfram Wrabetz

November 2016

Participation of Helmut Gründl at the "The Future of Savings" Conference - Business Models and Regulatory Changes in the New Environment Banque de France, Paris

November 2016

OECD Journal: Financial Market Trends

The Evolution of Insurer Portfolio Investment Strategies for Long-Term Investing

Helmut Gründl, Ming (Ivy) Dong, Jens Gal

Education Studies. Lectures. Seminars.





Enhanced Curriculum in the Field of Insurance Studies

Insurance Economics: Techniques, Management and Regulation



Even before it was officially announced that the new European supervisory body EIOPA might be coming to Frankfurt, the question was raised and discussed at the Goethe University as to where the future European supervisors were to be sourced.

Who can provide them with the necessary know-how to be able to monitor a highly heterogeneous European insurance environment? Who actually ensures that our European supervisors receive the required degree of advanced training?

Supervisory and regulatory systems for insurers are no end in themselves; they are intended to protect the consumers, guarantee the certainty of the insured persons' claims, safeguard the stability of the insurance market and, accordingly, ensure the availability of an attractive insurance offering. And they should, after all, not only permit innovations; they should even encourage ▶



and promote them if possible. If the benchmarks and parameters laid down by the regulatory and supervisory bodies are too high though, there is a danger that there will be no investors who will (voluntarily) want to operate in these markets. This short list alone shows that many and various conflicting interests will need to be resolved. It was clear from the outset that a platform is necessary to harmonize the interests of consumers, the insurance industry, insurance supervision and policy-makers alike. Offering this platform and ensuring the

Training and practice in insurance supervision to facilitate understanding of regulation techniques.

further development of supervisory techniques and providing training in their use has been and will continue to be the objective of the International Center for Insurance Regulation (ICIR) at the Goethe University.

For almost two decades now, European supervisory bodies have been dealing with Solvency II. What initially was very much an exemplary model and still was relatively easy to understand has meanwhile developed into a highly complex system – a system that only highly specialized

staff members with mathematical skills can understand and deploy in conformity with the purpose of supervision. A sound educational background on the topic is necessary to be able to work with Solvency II. This training is offered by the ICIR, and it obviously does not only address (future) employees of the su-pervisory bodies, but also especially all those who are entrusted with risk management at insurance companies.

Despite the many and various approaches and efforts to refine Solvency II to such an extent that it tracks the risks and the resulting equity resources needed by insurers as accurately as possible, Sol-veny II will always remain a model. And a model is not reality. Its users need to understand at what points the model tracks and reflects reality more or less well. This simultaneously means that it is far from sufficient to simply know the model; instead, the relevant experts need to understand and ex-actly control the object to be tracked – i.e. the insurance company and its transactions – to be able to apply the model in a meaningful way. Accordingly, the need for training in insurance supervision and practice extends far beyond what is necessary to facilitate pure understanding of regulation tech-niques.

The ICIR is making an effort to fulfill this need as well. This is being done through the implementation of the introductory lectures on insurance techniques referred to below.

At the same time, this is where we currently perceive the greatest need for further development of the ICIR: not only do we ourselves believe that there is scope for improvement in meeting this requirement, but we also believe that the enhancement and growth of the ICIR is absolutely essential!

For this reason, the ICIR and its supporters are currently making an effort to further reinforce the expertise in the field of insurance studies through a boost in personnel,

Education to intensify the level of understanding of insurance regulation.

i.e. the extension by a further chair in order to secure the (educational) mandate in the long term. The objective is to extend train-ing in the context of teaching pure insurance supervisory techniques and risk description models in such a way as to enable students – irrespective of whether they are pursuing graduate studies or executive education – to explain what an insurer is, what risk-bearing techniques it operates with, how the products are designed and marketed, what product classes (segments) there are and how the insurance markets actually function. In other ▶



words, education of future specialists and managers is intended to intensify the level of understanding of techniques and system-related dimensions of insurance regulation to understand what is regulated and how!

A major enhancement of the ICIR's expertise in teaching and instructing European insurance supervisory bodies was achieved by signing up Professor Karel van Hulle as honorary professor at the Goethe University. He used to rank in "chief position" for insurance matters on the EU Commission in Brussels. In the course of his lectures and seminars for bachelor and master students, not only does Karel Van Hulle present the structure and design of the European insurance supervisory system, but beyond this, in "Karel's Club – Executive Insurance Forum", he has created a platform that establishes and promotes dialog between insurance regulators and the international insurance industry.

For 30 years now, I as a practitioner and graduate from the Frankfurt insurance chair myself have been giving introductory lectures in the course of my scheduled events at the Goethe University in the functionality of insurance markets, product design and insurance techniques. In the summer semester, a lecture on this subject will be offered to bachelor students as part of a series of lectures with the participation of other insurers from the Rhine-Main region. In the winter semester,

master students will be able to intensify their studies by taking part in a seminar on the limitations of insurance technology with an in-depth focus on a different segment each year. This seminar will not be held behind closed doors at the university either, but in cooperation with insurers. This is to ensure interaction between theory and practice will be continually extended in this field of research.

Insurers, in turn, are very interested in these events because there is a high demand for well-trained

Insurers are interested in these events because there is a high demand for well-trained graduates.

graduates with a sound understanding of the fundamentals of the insurance business. The insurers are aware that the effort [and expense] of integrating new employees into the business who have acquired knowledge of the subject of insurance on their own is much lower – in the short term but especially in the long run – than if attempts are made to acquire industry outsiders and get them interested in the subject of insurance.

In summary, the objectives of the ICIR as part of its second mission "Education" can be described as follows:

- ♦ **Positioning of the ICIR and the Goethe University in Frankfurt as an educational institution for students, professionals and executives in the insurance industry with a European perspective.**
- ♦ **Graduate education of a larger number of junior talents for the insurance industry, insurance-related advisory services, auditing firms as well as regulatory and supervisory institutions with a European orientation.**
- ♦ **Enhancement of the already very comprehensive but overall rather bank-oriented study focus in the field of insurance through growth of academic and teaching capacity at the ICIR. ♦**

Curriculum Insurance Economics and Law at Goethe University

➤ 1
International Center for Insurance Regulation (ICIR)
Chair of Insurance and Regulation,
Prof. Dr. Helmut Gründl

➤ 2
Institut für Versicherungsrecht (IVersR)
Chair of Insurance Law,
Prof. Dr. Manfred Wandt

Insurance Economics¹

Bachelor Program

Fundamentals: Basic Concepts, Methods and Models in the Field of Finance and Insurance

Winter Term

Lecture

Finanzen III (Corporate Finance)

Prof. Dr. Helmut Gründl

Lecture

Risikomanagement und Versicherung

(Risk Management and Insurance)

Prof. Dr. Helmut Gründl

Seminar

Risk Management in Insurance Companies

Thomas C. Wilson, Ph.D.

Summer Term

Lecture

Versicherungsprodukte und deren Absatz

(Insurance Products and Distribution)

Hon. Prof. Dr. Hartmut Nickel-Waninger

Seminar (start 2017)

European Insurance Regulation

Hon. Prof. Karel Van Hulle

Master Program

Specialization in the Field of Insurance and Regulation

Winter Term

Seminar

Versicherungstechnologie und ihre Grenzen

(Insurance Technology and Its Limits)

Hon. Prof. Dr. Hartmut Nickel-Waninger

Seminar (start 2017)

Selected Topics in Insurance Regulation

Hon. Prof. Karel Van Hulle

Seminar (start 2017/18)

Value and Capital Management

in Insurance Companies

Thomas C. Wilson, Ph.D.

Summer Term

Lecture

Asset and Liability Management in

Insurance Companies

Prof. Dr. Helmut Gründl

Insurance Law²

Winter Term

Kolloquium

Deutsches und Europäisches Versicherungsvertragsrecht, Prof. Dr. Manfred Wandt

Lecture

European Insurance Contract Law, Jun. Prof. Dr. Jens Gal

Seminar

Versicherungsrecht – Rückversicherungsrecht

Prof. Dr. Manfred Wandt

Kolloquium

Deutsches und Europäisches Versicherungsvertragsrecht: Einführung ins Privatversicherungsrecht

Dr. Peter Reusch

Summer Term

Kolloquium

Deutsches und Europäisches Versicherungsvertragsrecht, Prof. Dr. Manfred Wandt

Seminar

Technischer Wandel als Herausforderung für das Haftungs- und Versicherungsrecht Prof. Dr. Manfred Wandt

Kolloquium

Vertiefung besonderer Probleme der VVG

Allgemeiner Teil, Dr. Peter Reusch

Herbstakademie Versicherung und Recht in Kooperation mit der Universität Mainz und der AachenMünchener, (2-jähriger Zyklus)

Lecture

Finanzen III (Corporate Finance)

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 is. ◆

Lecture

Risikomanagement und Versicherung (Risk Management and Insurance)

Prof. Dr. Helmut Gründl

Ziel der „Risikomanagement und Versicherung“ Vorlesung ist es, die Relevanz und die Prinzipien von Risikomanagement im Kontext von Versicherungen zu verstehen. Hierzu werden die Bereiche Lebens- und Nichtlebens-Versicherung einschließlich aktueller Entwicklungen betrachtet. Die Herangehensweise basiert unter anderem auf der Erwartungsnutzentheorie, der (kumulativen)Prospekt-Theorie sowie risikotheorietischen Ansätzen. In den Übungen wird eine Einführung in die statistische Programmierung gegeben und die Inhalte der Vorlesung auf verschiedene Problemstellungen angewandt. Die Studenten werden befähigt, moderne Theorie zu verstehen, zu reflektieren und anzuwenden. ◆

Lecture (Start 2017)

Versicherungsprodukte und deren Absatz (Insurance Products and Distribution)

Hon. Prof. Dr. Hartmut Nickel-Waninger

Ziel der Vorlesung ist es, das Grundkonzept der Versicherung sowie die Abgrenzung von Individual- und Sozialversicherung zu verstehen. Des Weiteren sollen ausgewählte Versicherungsprodukte aus dem Nicht-Leben-Bereich (Kfz-Versicherung, Gebäudeversicherung), dem Lebensversicherungs- und dem Krankenversicherungsbereich vorgestellt werden. Auf die Kalkulation der jeweiligen Versicherungsprodukte wird detailliert eingegangen. Einen weiteren Schwerpunkt des Moduls stellt die Absatzpolitik eines Versicherungsunternehmens dar. Dabei werden die Absatzstrategien und absatzpolitische Instrumente von Versicherungsunternehmen vorgestellt und hinsichtlich ihrer Vor- und Nachteile

diskutiert. Die Studenten werden befähigt, das Grundkonzept der Versicherung zu verstehen. Ebenso die Individualversicherung von der Sozialversicherung abzugrenzen. Sie bekommen einen Überblick über die Vielfalt der Versicherungsprodukte, erhalten einen vertieften Einblick in ausgewählte Versicherungsprodukte aus dem Nicht-Lebens-, Lebens- und Krankenversicherungsbereich. Sie werden in die Lage versetzt, quantitative Methoden der Versicherungskalkulation zu beherrschen und erhalten einen Einblick in die Absatzpolitik in der Versicherungswirtschaft und sollen die Vor- und Nachteile verschiedener Absatzwege verstehen. ◆

Seminar

Risk Management in Insurance Companies

Thomas C. Wilson, Ph.D.

The seminar aims at introducing students to the basic concepts of risk management in insurance companies. During the seminar, the students will 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. Learn how to interpret, classify and critically discuss results of scientific research and more. Generally improve presentation and communication skills. ♦

Seminar (Start 2017)

European Insurance Regulation

Hon. Prof. Karel Van Hulle

The seminar aims at providing students with basic knowledge about insurance regulation and supervision in the EU. During the seminar, students will first receive a general introduction about insurance regulation and supervision in the EU. They will then have to research a topic relating to insurance regulation and/or supervision, to present their research and to discuss the outcome with fellow students. Students will be able to select the relevant topic from a list provided in advance. The topics will relate to areas such as Solvency II, market conduct, insurance distribution, supervisory co-operation, etc. ♦

Lecture

Asset and Liability Management in Insurance Companies

Prof. Dr. Helmut Gründl

The goals of the ALMI lecture are to understand asset and liability management strategies used in insurance companies, and to understand the new Solvency II insurance regulatory rules. The contents of the ALMI lecture are separated into three categories: Liability Management, Asset Management, and Asset Liability Management and Solvency II. The first part – Liability Management – focuses on topics such as risk pooling, insurance pricing, estimation of reserves, risk sharing, reinsurance, alternative risk transfer, and capital management. Students are supposed to understand the sources of risks in insurance companies, and to learn techniques to measure and limit these risks. For the Asset Management part, the lecture applies classic pricing methods as

well as performance measurements to the insurance context. Specifically, in this part students are expected to practice knowledge such as Markowitz Diversification, CAPM, Performance Measurements, and Dynamic Financial Analysis. In addition, the second part offers insights into the regulatory framework for insurers' investment policies. The last part – Asset Liability Management – integrates both asset management and liability management strategies to arrive at an integrated risk management of insurance companies. It aims to help students understand the motivation and importance of conducting ALM, and to further equip students with methodologies such as simultaneous and classic modeling based on the Markowitz approach. Furthermore, policyholders' reactions on the default risks of insurers are also incorporated as one of the topics. We also discuss the envisaged Solvency II regulatory regime and its implications for ALM. ♦



Seminar

Versicherungstechnologie und Ihre Grenzen (Insurance Technology and Its Limits)

Hon. Prof. Dr. Hartmut Nickel-Waninger

Im Rahmen des Seminars erarbeiten die Studierenden wie Unternehmen ihre Risiken erkennen und bewerten können um auf dieser Basis Konzepte zu ihrer Risikotragung zu entwickeln. Das zentrale Thema des Seminars variiert jedes Jahr und beinhaltet beispielsweise aktuelle Entwicklungen in den Bereichen der Haftpflichttrisiken und Luftfahrtrisiken oder aktuelle Fragestellungen zu den Themen Lebensversicherung und Krankenversicherung. Neben der Diskussion aktueller theoretischer und praktischer Problemstellungen ist die Aufarbeitung komplexer versicherungstheoretischer Modelle durch die Studierenden ein zentraler Bestandteil des Seminars. Zudem nimmt in jedem Jahr ein externer

Referenten teil, welcher die Teilnehmer durch einen themenbezogenen Vortrag über aktuelle praktische Entwicklungen des ausgewählten Themas informiert. ♦

Seminar (Start 2017)

Selected Topics in Insurance Regulation

Hon. Prof. Karel Van Hulle

The objective of the seminar is to build on the knowledge acquired in the bachelor seminar on European Insurance Regulation. Students are required to research a specific topic, to report about their research and to discuss the results of the research with their fellow students. As opposed to the bachelor seminar, the topics in the master seminar will have to be researched on a comparative basis. The topics will be provided in advance and will relate to issues such as the ORSA, key governance functions, assessment of fit and proper requirement for key function holders, internal model approval, market conduct issues, insurance distribution. ♦

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

Deutsche Versicherungsakademie (DVA)

Gesamtverband der Deutschen
Versicherungswirtschaft (GDV)

March 8–9, 2016

Karel's Club Executive Insurance Forum Good Governance: Myth or Reality?



The fifth meeting of the Karel's Club addressed the topic of corporate governance, the second pillar of Solvency II that deals with the qualitative issues.

Much attention has been and is still being paid to the first pillar of Solvency II, which determines the level of solvency capital which insurers need to hold in order to match the risks to which they are exposed. Experience has however shown that when insurance undertakings fail, it is often not so much because of a lack of capital but because of bad management and a deficient governance.

The Solvency II Framework Directive recognises this and attaches much importance to governance. In accordance with the Directive, all insurance and reinsurance undertakings must have in place "an effective system of governance which provides for sound and prudent management of the business. The system must at least include an adequate transparent organisational structure with a clear allocation and appropriate segregation of responsibilities and an effective system for ensuring the transmission of information". ▶

As Solvency II applies to about 4000 insurance and reinsurance undertakings, most of which are small or medium-sized, it is of utmost importance that the governance requirements respect the great variety of legal structures and the size of the undertakings concerned. The Directive therefore states that “the governance system must be proportionate to the nature, scale and complexity of the operations of the insurance or reinsurance undertaking”.

Four key governance functions are introduced under Solvency II: the risk management function, the internal control function, the internal audit function and the actuarial function. The persons in charge of these functions must be fit and proper. In smaller and less complex undertakings it is possible for more than one function to be carried out by a single person or organisational unit. It is however understood that the internal audit function must in principle always be a separate function.

A number of provisions in the Solvency II Framework Directive deal specifically with the system of governance (Articles 40 to 49, Article 132 and Article 246). These provisions are further clarified in the Commission Delegated Regulation (Articles 258 to 275). Further details are provided in the EIOPA Guidelines on the system of governance.

An important change following from Solvency II is that insurance and reinsurance undertakings are now required to move from a system of implicit governance to a system of explicit governance, i.e. undertakings will now have to develop written policies in relation to governance, which must be reviewed at least annually and which are subject to prior approval by the Board. The policies must be adapted in view of any significant change in the system or area concerned.

Good governance should be part of the DNA of any insurer.

From their side, supervisory authorities must have appropriate means, methods and powers for verifying the system of governance. They must also have the powers to require an improvement and strengthening of the system of governance to ensure compliance with the governance requirements. ◆

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

Dialogue 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). ◆

Leading Questions

Good Governance: Myth Or Reality?

Regulatory Challenges

- How far should Member States go in the implementation of the new governance requirements in the Solvency II Framework Directive? Should they just copy the principles or rewrite the principles taking into account the national legal environment? What should happen in the case of divergences?
- How should the actuarial function be combined with the function of the “responsible/appointed actuary”?
- How flexible should governance requirements be?
- How far should the harmonisation of governance rules go at EU level? Is there a need to develop uniform governance rules?
- How should the proportionality principle be applied in practice? Is it possible to combine all key governance functions under one person or organisational unit?
- Are there any governance requirements introduced for banks that can usefully be extended to insurance undertakings?

Strategic Questions

- Is it possible to make the CFO responsible also for the risk management function and the actuarial function?
- Should the CRO be a member of the Board?
- Are all key governance functions control functions?
- Should the actuarial function be made independent from the risk management function?
- How should the reporting lines within the undertaking be organised in relation with the four key governance functions?
- What action can the Board take to ensure that its members are fit and proper?
- Which of the four key governance functions should report directly to the CEO?
- Should the person in charge of the internal control function be a person with a legal education?
- Should supervisors entertain a continuous dialogue with each of the persons in charge of a key governance function?

Possible Solutions

- Learn from best practice and avoid overly detailed governance rules
- Establish clear reporting lines and ensure that each holder of a key governance function can express an independent opinion
- Give preference to substance over form in the application of the governance requirements
- Ensure that supervisors have a regular dialogue with more than one holder of a key governance function (in addition to the CEO)
- Avoid unnecessary interference in the life of companies, for instance by requiring pre-notification to the supervisory authority of appointments of key office holders and Board members
- Allow for creativity in the practical organisation of the governance requirements
- Ensure that the actuarial function is more than just a contribution to the risk management function

Program

Good Governance: Myth Or Reality?

Tuesday, March 8, 2016

Goethe University Guest Villa,
Frauenlobstrasse 1, 60323 Frankfurt

18.00 – 18.15

Executive Insurance Forum Opening

Prof. Karel Van Hulle, ICIR,
Goethe University Frankfurt

18.15 – 18.45

Governance rules in a changing environment

Dr. Monica Maechler, Member of the Supervisory Board of Deutsche Börse AG (Frankfurt) and of the Board of Directors of Zurich Insurance Group Ltd (Zurich)

18.45 – 19.15

How does a CEO cope with the increasing complexity of governance rules?

Bart De Smet, CEO of Ageas NV (Brussels)

19.15 – 19.45

Compliance: Is it only about controls?

Gabe Shawn Varges, Senior Partner,
HCM International AG (Zurich)

19.45 – 20.15

How to supervise the new Solvency II governance rules?

Alberto Corinti, Member of the Board of Directors of IVASS (Rome)

20.15 – 21.00

Debate and Discussion

21.00

Dinner

Wednesday, March 9, 2016

Goethe University Guest Villa,
Frauenlobstrasse 1, 60323 Frankfurt

09.00 – 9.15

Introduction

Prof. Karel Van Hulle, ICIR,
Goethe University Frankfurt

09.15 – 09.45

Why do supervisors attach so much importance to governance?

Gabriel Bernardino, Chairman EIOPA
(Frankfurt)

09.45 – 10.15

Solvency II and Corporate Governance

Prof. Michele Siri, Università di Genova
(Genoa)

10.15 – 10.45

The role of the CRO in risk management

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

10.45 – 11.15

The actuarial function: A function in its own right?

David Hare, Partner, Actuarial and Reward Analytics, Deloitte MCS Ltd (Edinburgh)

11.15 – 12.00

Debate and Discussion

12.00 – 12.30

What is so special about internal audit and how can it contribute to better governance?

Hans Joachim Büsselberg, Chair of the Insurance Committee of ECIIA (Brussels)

12.30 – 13.00

Is governance just a question of rules?

Romain Paserot, Directeur des Affaires internationales, ACPR (Paris)

13.00 – 14.00

Debate and Discussion

14.00

Lunch

15.00

End of Forum



Events Calendar



ICIR Events

➤ [ICIR Events](#)

➤ [ICIR Event Gallery](#)



March 8 – 9, 2016
Goethe University Villa, Frankfurt
Karel's Club – Executive Networks
Good Governance: Myth or Reality?
Moderation: Karel Van Hulle

June 27, 2016
House of Finance, Frankfurt
SAFE ICIR Research Seminar
Does National Flood Insurance Program Participation Induce Housing Development
Mark Browne, Ph.D.
Professor at the School of Risk Management, Insurance and Actuarial Science, St. John's University, New York, US

June 28, 2016
House of Finance, Frankfurt
Talk on Insurance and Regulation
A Critical Perspective on the Solvency II Implementation – An (Un)level Playing Field in Times of Low Interest Rate
Dr. Dieter Wemmer
Member of the Board of Management of Allianz SE, Finance, Controlling, Risk (CFO)
Dr. Frank Grund
Chief Executive Director of Insurance and pension funds Supervision, Federal Financial Supervisory Authority (BaFin)

July 7, 2016
House of Finance, Frankfurt
SAFE ICIR Research Seminar
Risk Attitudes, Family Transitions and the Economy
Mark Browne, Ph.D.
Professor at the School of Risk Management, Insurance and Actuarial Science, St. John's University, New York, US

October 20, 2016
House of Finance, Frankfurt
Talk on Insurance and Regulation
Community Life - Rethinking Insurance for Times of Digital Change
Dr. Claudia Lang
Founder & Managing Director, Community Life

November 8 – 9, 2016
House of Finance, Frankfurt
Optimal Retirement Spending and Insurance - When Biological Age and Chronological Age Differ
Prof. Moshe A. Milevsky
Finance Professor at the Schulich School of Business, York University, Toronto, Canada

November 16 – 17, 2016
Forschungskolleg Humanwissenschaften, Bad Homburg
ICIR-SAFE Research and Policy Workshop
Systemic Risk in the Insurance Industry





International
Center for
Insurance
Regulation



Imprint

Publisher

International Center for
Insurance Regulation
(ICIR)

House of Finance
Goethe University Frankfurt
Theodor-W.-Adorno Platz 3
60629 Frankfurt
Germany
+49 (0)69 798 33 693
icir@finance.uni-frankfurt.de

Authors

Helmut Gründl
Jozefina Kontic

Photos

Uwe Dettmar
Jürgen Lecher

Illustrations and Graphicdesign

Andrea Ruhland (info@andand.de)
Kim Angie Cicuttin (hello@kimangiecicuttin.com)

www.icir.de