Seminar „Topics in Insurance and Risk Management“

1) Systemic Risk in the Insurance Sector: A Review and Directions for Future Research (Eling & Pankoke, 2016)
2) Enhanced annuities and the impact of individual underwriting on an insurer's profit situation (Hoermann & Ruß, 2008)
3) Misery Loves Company: The Spread of Negative Impacts Resulting from an Organizational Crisis (Yu, Sengul, & Lester, 2008)
4) Insurability of Cyber Risk: An Empirical Analysis (Biener, Eling, & Wirfs, 2015)
5) How Cellphone Bans affect Automobile Insurance Markets (Karl & Nyce, 2017)

1) Systemic Risk in the Insurance Sector: A Review and Directions for Future Research

Ansprechpartner: Philipp Reichel

Literaturhinweis:

Eling, M., & Pankoke, D. A. (2016). Systemic Risk in the Insurance Sector: A Review and Directions for Future Research. *Risk Management and Insurance Review*, 19(2), 249-284.

Abstract:

This article reviews the extant research on systemic risk in the insurance sector and outlines new areas of research in this field. We summarize and classify 48 theoretical and empirical research papers from both academia and practitioner organizations. The survey reveals that traditional insurance activity in the life, nonlife, and reinsurance sectors neither contributes to systemic risk nor increases insurers' vulnerability to impairments of the financial system. However, nontraditional activities (e.g., credit default swap underwriting) might increase vulnerability, and life insurers might be more vulnerable than nonlife insurers due to higher leverage. Whether nontraditional activities also contribute to systemic risk is not entirely clear; however, the activities with the potential to contribute to systemic risk include underwriting financial derivatives and providing financial guarantees. This article is not only likely of interest to academics but also highly relevant for the industry, regulators, and policymakers.

2) Enhanced annuities and the impact of individual underwriting on an insurer's profit situation

Ansprechpartnerin: Sarah Krömer

Literaturhinweis:

Hoermann, G., & Ruß, J. (2008): Enhanced annuities and the impact of individual underwriting on an insurer's profit situation. *Insurance: Mathematics and Economics*, 43(2008), 150-157.

Abstract:

We analyze the effect of enhanced annuities on an insurer engaging in individual underwriting. We use a frailty model for heterogeneity of the insured population and model individual underwriting by a random variable that positively correlates with the corresponding frailty factor. For a given annuity portfolio, we analyze the effect of the quality of the underwriting on the insurer's profit/loss situation and the impact of adverse selection effects.

3) Misery Loves Company: The Spread of Negative Impacts Resulting from an Organizational Crisis

Ansprechpartnerin: Dinah Heidinger

Literaturhinweis:

Yu, T., Sengul, M., & Lester, R. H. (2008). Misery Loves Company: The Spread of Negative Impacts Resulting from an Organizational Crisis. *Academy of Management Review*, 33(2), 452-472.

Abstract:

We describe how negative impacts emanating from an organizational crisis that initially strikes only one organization can overflow the boundaries of that organization and affect others in the industry. We argue that this spillover process is contingent on the characteristics of the organizational form to which the stricken organization belongs, the characteristics of other organizations in the same industry, and the characteristics of the industry itself. Finally, we speculate that the spillover process, coupled with differential mortality, might move crisis-prone industries toward more robust structures over time.

4) Insurability of Cyber Risk: An Empirical Analysis

Ansprechpartner: Philipp Lechner

Literaturhinweis:

Biener, C., Eling, M., and Wirfs, J. (2015). Insurability of Cyber Risk: An Empirical Analysis. *Geneva Papers on Risk and Insurance,* 40(1), 131-158.

Abstract:

This paper discusses the adequacy of insurance for managing cyber risk. To this end, we extract 994 cases of cyber losses from an operational risk database and analyze their statistical properties. Based on the empirical results and recent literature, we investigate the insurability of cyber risk by systematically reviewing the set of criteria introduced by Berliner (1982). Our findings emphasize the distinct characteristics of cyber risks compared to other operational risks and bring to light significant problems resulting from highly interrelated losses, lack of data, and severe information asymmetries. These problems hinder the development of a sustainable cyber insurance market. We finish by discussing how cyber risk exposure may be better managed and make several suggestions for future research.

5) How Cellphone Bans affect Automobile Insurance Markets

Ansprechpartnerin: Katrin Osterrieder

Literaturhinweis:

Karl, J. B. & Nyce, C. (2017). How Cellphone Bans affect Automobile Insurance Markets. *Journal of Risk and Insurance*, (forthcoming).

Abstract:

In this article, we examine the effect of laws prohibiting the hand-held use of a cellphone while driving on the automobile insurance market. Our research is motivated by prior studies that present evidence that the enactment of such laws alters drivers' behaviors in ways that reduce the risk of automobile accidents. We posit that that, by extension, these laws should also lead to reductions in the amount of losses paid by private passenger automobile physical damage insurers. Our analysis indicates that the enactment of a ban on the hand-held use of a cellphone while driving reduces the incurred losses and incurred loss ratios of automobile insurers by approximately 3 percent, suggesting that these bans have important economic consequences not previously documented in the literature. Additional analysis suggests that hand-held cellphone bans eventually lead to incremental reductions in premiums, but we do not observe these reductions in premiums until a couple of years following the enactment of a ban. Our analysis of automobile insurance losses also represents a departure from most prior studies of cellphone bans and therefore contributes to the ongoing debate in the public health literature regarding the extent to which hand-held cellphone bans have implications for traffic safety.