

Debora ZAPAROVA

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CURRENT ACTIVITY

- since 2016 PhD candidate, BETA, University of Strasbourg
Defense expected in the spring of 2021
Advisors: Prof. Sandrine Spaeter (BETA, University of Strasbourg)
Prof. Meglena Jeleva (EconomiX, Paris Nanterre University)
- since 2019 Teaching and research assistant (ATER), University of Strasbourg

EDUCATION

- 2016 M.S. in Economics, University of Strasbourg, first-class honors
Major: Economics of risk and insurance
- 2014 Licence degree in Economics, University of Strasbourg
Major: Quantitative economics

RESEARCH INTERESTS

Decision-making under risk and uncertainty
Risk-sharing and mutualization
Economics of risk and insurance
Experimental economics

CURRENT RESEARCH

Behavioral contract or bonus-malus contract for improving prevention: an experimental approach, with Meglena Jeleva and Mathieu Lefebvre

The recent use of telematics data related to the policyholder's behavior makes it possible, in theory, to tie the automobile insurance premiums to the preventive effort rather than claims history, as it is the case with a bonus-malus system. To our knowledge, no experimental study has been conducted neither on the incentives for prevention of the bonus-malus contracts, nor on the comparison between the latter and the new contract types based on the individual behavior. We develop a theoretical model of optimal prevention effort under two contract types and design an experiment to test our predictions on how the contract type affects the policyholders' self-protection effort, as well as on the preferences towards one type or another. We find that the subjects choosing a behavioral contract provide higher levels of prevention effort than the subjects choosing a bonus-malus contract. Moreover, the contract choice seems to be determined by the individual preferences for prevention. We also find that the risk-seeking subjects provide less effort to decrease their loss probability, and the same holds true for the more prudent subjects.

WORKING PAPERS

Mutual or stock insurance: solidarity when insolvency matters, BETA working paper 2020-06.

This paper analyzes the choice of the insurer, mutual or stock, for a heterogeneous population aware of the insurers' probability of insolvency. The stock insurer sets individualized premiums and manages his probability of insolvency by means of a premium loading, in contrast to the mutual insurer who sets an average premium and allows a possibility to adjust the premium level ex-post. We assume that information is symmetrical due to the data availability on individual characteristics and actions, and, as a consequence, that it is possible to perfectly differentiate risk types. Despite the idea that the individualization of insurance premiums is advantageous for the stock insurers and the low risk agents, we show that under some conditions the mutual insurer is optimally preferred by the entire population of high and low risk agents. The existence of such an equilibrium depends on the relative weight of each group of risks in the population, and on the size of the risk loading. For a sufficiently small group of low risk agents, an increase in the risk loading provides an incentive to pool their risk with the high-risk agents through the mutual agreement.

Risk pooling and ruin probability, or why high risks are not bad risks, with Sandrine Spaeter, BETA working paper 2019-33.

The aim of this paper is to address the recently appeared issue of the risk type revelation and the impact it could have on high risk agents in the insurance sector. We argue that the possibility to identify different risk types and better tailor insurance contracts, provided by recent innovations related to data collection, does not mean that high risks should be dismissed, in particular because the intention of insuring low risks only can lead to solvency issues. We introduce heterogeneous risks and two types of risk loading in the analysis, because the size, the combination of risk types and their contribution to the buffer fund through the loaded premiums are the elements that define the insurer's risk and solvency. We show how the insurer's risk and the probability of insolvency are affected by the composition and the size of an heterogeneous insurance portfolio, which must be considered given the legal requirements relative to the insurer's insolvency. Moreover, under some conditions, high risk agents contribute more to the insurer's ability to manage the risk of insolvency. Overall, we argue that the information on the risk types should be used to provide incentives for risk reduction to the agents revealed to be high risks.

COMMUNICATIONS

ADRES Doctoral conference, Strasbourg (2021), scheduled online
Doctoral seminar, Paris Nanterre University (2019)
Doctoral seminar, University of Strasbourg (2019)
Congrès de la Société canadienne de la science économique (2019)

TEACHING EXPERIENCE

since 2019 Probability Theory and Statistics (first- and second-year undergraduate)
since 2017 Finance (third-year undergraduate)
since 2016 Microeconomics (first-year undergraduate)

OTHER ACADEMIC ACTIVITIES

- 2016-2019 Teaching assistant, University of Strasbourg
- 2019 Visiting doctoral student, University of Konstanz, Germany, June-July 2019
- 2018 Co-organizer of the Augustin Cournot Doctoral Days (ACDD) 15th edition

LANGUAGES AND SOFTWARE

- Languages French (fluent), English (fluent), Russian (native)
- Software Stata, R, \LaTeX

REFERENCES

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