

II. REVIEWS AND NOTES

Ilona Kwiecień (ed.): UBEZPIECZENIA WE WSPÓŁCZESNYM ŚWIECIE. PROBLEMY I TENDENCJE [MODERN DAY INSURANCE. PROBLEMS AND TRENDS]. WUE 2017, 252 pp.

It is with the greatest pleasure that one reviews publications dedicated to such special events as jubilees of prominent academics, achievements of institutes, faculties and departments, and of conferences. Each publication of this kind shows the enormous effort put into the development of Polish science, and not only that. Academic accomplishments of experienced scientists, their attitude, and their usefulness for the purpose of developing scientific theory and practice provide also a model to be followed by the new generations of researchers. Such publications are truly priceless as they will become subjects for consideration by future scientists.

The reviewed monograph, dedicated to Professor Dr.hab. Wanda Ronka-Chmielowiec and her Department of 10 years, is one of such publications.

The monograph consists of two parts. The first one deals with the research and didactic activities of Professor Ronka-Chmielowiec as well as the ten years of the Department of Insurance. The second part contains selected articles written by scientists from various research centres in Poland and one from the University in Pardubice, in the Czech Republic.

In the first part of the monograph the reader will find the resume of the academic career of Professor Ronka-Chmielowiec, including her numerous published books and articles. They constitute an impressive body of work on the subject of financial and actuarial mathematics, however the main point of interest remains in modelling insurance risk and in the insurance of persons and assets. There are also many publications related to managing risk by insurance companies and to the financial management of insurance underwriters.

Professor Ronka-Chmielowiec has included the results of her research in numerous books and articles, some of which were presented at conferences, she has also reviewed many doctoral and post-doctoral dissertations, as well as numerous articles and scientific monographs published in Poland and abroad. During her many years of academic career the Professor has supervised writing 18 doctoral dissertations, and several MSc and BSc thesis, and made a significant

contribution to the education of young academic staff and future managers. Another important aspect of this distinguished career were the academic functions performed by the Professor in the capacity of a member of the university senate, dean, the head of the Department of Insurance, the head and a tutor of the post-graduate studies, board member of editorial boards in academic periodicals and a member of scientific councils. To celebrate such professional accomplishments Professor Ronka-Chmielowiec has received three individual awards from the Minister of Education, around thirty from the University Rector as well as the prize from the Chamber of Commerce of Insurance and Risk Management (in 2015). The Professor is the creator of the dynamically developing centre of research on matters related to insurance in Poland, and her works have been of great use for the theory and practice of insurance.

The part dedicated to the tenth anniversary of the Department of Insurance illustrates its development following several organizational changes within the then Academy of Economics in Wrocław. The department consists of Professor Ronka-Chmielowiec and six assistant professors, whose academic interests and research work are focused on, among others, life and property insurance, theory of insurance, risk management, financial and actuarial mathematics, and insurance companies finance. The body of work of the Department of Insurance includes 50 monographs and textbooks, around 300 published articles and 200 academic papers, 12 research projects, 13 corroborated PhD and post-PhD dissertations. The scientific research of the department involved six team projects and eight supervisory grants. Since 2006 the Department of Insurance has been organizing annual international academic conferences entitled "Insurance facing the challenges of the 21st century", which are consistently very well received as shown by the multitude of the published articles by both Polish and foreign researchers. The conference subjects have been dominated by the matters of the insurance market, risk management, insurance law, application of quantitative methods, insurance finance, social and pension risks. The department was also a co-organizer of the conference "INWEST – Financial Investment and Insurance". From among the resulting 19 important papers, 12 were prepared under the guidance of Professor Ronka-Chmielowiec. The department's academic staff have also published 37 articles in English. The research currently carried out by the department focuses on such issues as personal liability, vehicle insurance, company insurance, real estate insurance and measurement of risk for the purposes of Solvency II. Additionally the department collaborates with many practitioners (brokerage and insurance companies), institutions from the insurance sector (KNF [Financial Supervision Authority], and Financial Ombudsman). The members of the department are also active as reviewers, members of academic editorial boards, expert witnesses and legal advisors.

The issues related to personal and property insurance are so extensive and complex that we should welcome every publication on these subjects. The

16 articles presented in the monograph cycle cover the selected aspects of life insurance, pensions, theory of insurance and mathematical modelling, and thus provide diversified content and research problems.

The monograph, due to the subject matter, can be divided into the following parts:

- the first refers to a broadly interpreted subject of pensions and includes the following articles:
 - *Znaczenie okresu emerytalnego w kalkulacji świadczeń rentowych z tytułu utraconych dochodów z ubezpieczeń odpowiedzialności cywilnej* discusses the issue of retirement benefits based on the loss of income, hypothetical levels of post-accident damages for various population groups and their taxation. It draws attention to the period of receiving such a benefit and to the need of its indexation in time. On this basis it introduces the concept of a discrete living annuity increasing on the assumption of annual interest rate and the annual inflation rate as well as the probability of survival. Based on this model a comparison was made of the retirement ages in Poland, Germany and the Czech Republic, average pension, retirement contributions and the replacement rate.
 - *Przemiany demograficzne społeczeństwa w Polsce jako czynnik rozwoju dodatkowego zabezpieczenia emerytalnego i zdrowotnego* takes up the problem of population ageing and its consequences for the future of Poland and its pension system. On the basis of the anticipated data, the article addresses the following: the growing trend in the average post-retirement survivability age, excess male mortality rate, changes in the age structure of the population, and decreasing birth rate. The third part of the article puts forward the proposal of creating additional retirement fund during the period of professional activity and the creation of additional retirement programmes. Finally, the concluding part attempts to answer the question of whether it is possible to create an additional health insurance for the ageing population.
 - *Reformowanie systemów emerytalnych w krajach Europy Środkowo-Wschodniej*, in which the author tries to evaluate the reforms of pension systems in the countries of Central and Eastern Europe. She then describes the characteristics of the structural reforms of the pensions following the economic crisis of 2009, attempting to answer the question of which of these countries felt most acutely its effects in their system of retirement annuities. Finally the author evaluates the withdrawal from the capital-based forms of the pension system and stresses the need for its continuous improvement.
 - In the article *Przyczynę do dyskusji nad wysokością wieku emerytalnego w kontekście kondycji polskiego społeczeństwa*, the author poses the question of whether it is possible to find an economic justification for lowering the official retirement age in the current socio-economic climate. The author makes a comparison of the retirement ages in various European countries,

as well as the legal acts introduced after 1948 related to the ageing of population and on such basis conducts analyses of statistical data regarding this process in many countries and regions. The final part of the article considers the issues of population ageing and the economic situation of Polish pensioners.

- The second group of the articles considers the issues of risk in property and life insurance, among which the following should be mentioned:
 - *Ryzyko w ubezpieczeniach na życie* [Risk in life insurance] regards the subjects from the area of mathematical demographics. The proposed mathematical models are used in the actuarial mathematics since they estimate a significant parameter, i.e. the risk in population survivability. In relation to this risk and its calculation, it is possible to evaluate contributions in life insurance policies. The article recaps typical laws of survivability.
 - *Przesuwanie granic ubezpieczalności ryzyka* [Shifting the borders of insurability of risk], considers the subject linked with the possibility of insurance against certain threats. The author poses the thesis of the shifting boundaries between insurable and non-insurable risk and describes the behaviour of insurers in respect of insurance for difficult cases of risk, and the criteria they assume to assess such risks. The final part of the article describes the shifting boundaries of insurability of risk using the example of selected European countries.
 - *Szacowanie pewnych zagrożeń w kontekście zarządzania ryzykiem* [Assessment of certain threats, deals with the assessment of certain threats in the context of risk management, and discusses the problem of quantitative and qualitative methods of identifying insurance risk. The first part analyses the methods of assessing professional risk while indicating the weak points of the norm PN-EN 18002:2000 used to calculate not only the risk related to machinery but also to various professions. It highlights the need to select a method of risk assessment based on the purpose it is to serve. The author dedicates significant space to describing the inductive, deductive and qualitative ways of risk assessment such as a tree of errors and tree of events.
 - In *Ryzyko inwestycyjne – pomiar w konwencji czasu* [Investment risk – measuring in terms of time], with the use of measures of investment risk the author points to time as a random variable of risk. The article then describes a continuous and discrete stochastic process, and on such theoretical basis poses the question of how the final value of an investment is shaped using the recognized statistical measures. Based on the above, and applying Brownian motions, the author presents (with the assumed premise) a final mortgage value of an investment.
 - *Rozpoznanie ryzyka dla ubezpieczenia auto casco pojazdów samochodowych o napędzie hybrydowym* attempts an assessment of the possibility of insuring hybrid engine cars which already are in use and will become even more popular in future. The author discusses the technical specificity of using

hybrid engine cars based on the provided examples, anticipates the principles of possible insurance of such vehicles, and the hypothetical damage which may occur as a result of collisions and road accidents. The author expresses also her opinion regarding the level of the sum insured and of insurance premiums, and the specificity of claims settlement for this type of cars.

- *Ubezpieczenia na życie z ubezpieczeniowym funduszem kapitałowym między ekonomią a prawem*, the author severely criticized the issues of surrender fees and surrender value, approaching them from a legal viewpoint, at the same time pointing out insufficient economic knowledge on the part of customers, the fact which is keenly abused by insurers. Thus the author proves that in regard of the products offered by insurance capital funds, a client becomes a victim while insurance companies obtain fabulous profits.
- In the article *Ubezpieczenia we współczesnym świecie. Problemy i tendencje* [Insurance in the modern world, problems and trends], the author addresses the concept of risk in its social and welfare aspect. Social risk is presented in its basic scope (according to the catalogue of risks) as well as the extended one. The discussion on this concept refers to households and to the role of the state in their protection. Furthermore, the author also considers the concept of managing social risk of households by posing some questions as to who manages risk and to what extent, and what is the role of the state? In this context the author indicates the need of insurance for households.
- The third group of the remaining articles covers a variety of subjects, among them the following:
 - The article *Modelling and Simulation of the Most Costly Catastrophe Losses*” deals with the problems related to simulating catastrophe losses, based on data regarding the greatest global catastrophes in the period of 1970-2015. The article makes use of the selected probabilistic models, and on the basis of the obtained data carries out a trial modelling of costs, catastrophe losses and attempts to apply selected distributions (Pareto, Weibull and Lognormal). Thus it indicates the need to raise insurance premiums and apply disproportionate reinsurance.
 - In *Anomalie na rynku finansowym. Co z paradygmatem finansów?* [Anomalies in the financial market. What about the financial paradigm], the author turned her attention to the issue of aggressive behaviour of financial institutions towards their clients in the context of the effects of the recent economic crisis. The article highlights the breakdown of the ‘win-win’ principle in the field of finance, clearly stating that greed gains precedence over service, and that a client is perceived merely as a provider of means and is not treated as an important subject in financial relations. The author also points out the low level of financial acumen among customers which is promptly abused by, for example, banks and insurance companies, and stresses the fact that the functioning of the market laws has turned out to be disadvantageous for the customer.

- The article *Interwencja produktowa jako instrument ochrony konsumentów w sektorze ubezpieczeń* discusses the role of the European Insurance and Occupational Pensions Authority, as well as the national level supervision in regard of consumer protection in the insurance market. In particular, the role of these institutions focuses on protecting the insured from investment products of a dubious value for their buyers. The author indicates the EU legislation, as well as domestic laws, which did not provide sufficient customer protection in the insurance market. The author justifiably points out the low ability of consumers related to (calculation) the level of financial knowledge in evaluating the offered insurance products.
- *Specyfika kalkulacji składki ubezpieczeniowej w ubezpieczeniu kredytu kupieckiego* [The specifics of calculating an insurance premium in trade credit insurance], considers the specifics of calculating the price of insurance cover. The author describes the characteristics of the parameters of financial policy of insurers who offer trade credit insurance. Then the article describes with the use of quantitative methods the models of risk calculation of insurance premiums in trade credit insurance.
- The purpose of the article *Czynniki popytu na reasekurację oraz rentowność ubezpieczycieli na rynku ubezpieczeń non-life w Polsce* [Factors of demand for reinsurance and profitability of insurers in the market of non-life insurance in Poland] is to examine the main factors of demand for reinsurance. It considers the economic parameters of eight insurance companies in the period of 2006-2014, and applies the method of statistical mathematics using the GRET program. As a result it confirms the hypothesis of a significant added value of financial leverage and solvency ratio in the demand for reinsurance.
- *Ubezpieczenia po globalnym kryzysie finansowym i strategiczne elementy zmian* [Insurance in the aftermath of the global financial crisis and strategic elements of change], concentrates on a few key issues. First, the article discusses the role of state and the new dimension of insurance regulations highlighting the growing market activity of the state and the change of regulatory paradigm. Next the authors discuss, among the insurance regulations, the relatively less known ordering in regard of restructuring, liquidation and bankruptcy procedures. Finally the authors evaluate the ongoing changes in the supervision of insurance activity, in particular the development of consumer, macro and micro-prudential supervision.

In summing up this monograph I would like to stress the great scientific contribution on the part of Professor Ronka-Chmielowiec and the staff of the Department to the knowledge of insurance. The monograph constitutes a very valuable and unique publication which in its present form should become popular among the researchers from other universities as well as insurance companies.

Stanisław Wieteska, University of Łódź