

**RYZIKO W PROCESACH GOSPODARCZYCH, SPOŁECZNYCH I INWESTYCJACH
KAPITAŁOWYCH**

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SPIS TREŚCI

WSTĘP	7
Jan Acedański: CENY AKCJI W WYBRANYCH MODELACH DSGE Z SEKTOREM PRODUKCJI	9
Summary	36
Maria Balcerowicz-Szkutnik: ANALIZA RYZYKA DEMOGRAFICZNEGO W POLSCE I WYBRANYCH KRAJACH UNII EUROPEJSKIEJ	37
Summary	56
Magdalena Chmielowiec-Lewczuk: ANALIZA KOSZTÓW W POLSKICH ZAKŁADACH UBEZPIECZEŃ W LATACH 2003-2007	57
Summary	68
Monika Hadaś: EFEKTYWNOŚĆ SIECI NEURONOWEJ W ANALIZIE PORTFELOWEJ NA PRZYKŁADZIE SPÓŁEK GPW W WARSZAWIE.....	69
Summary	89
Bartosz Lawędziak: SEKURYZACJA RYZYKA EKONOMICZNEGO NA PODSTAWIE INDEKSU MRD UWZGLĘDNIAJĄCEGO UWARUNKOWANIA POGODOWE.....	91
Summary	107
Agnieszka Przybylska-Mazur: ZASTOSOWANIE TESTU PESARANA- -TIMMERMANNA DO PROGNOZOWANIA KIERUNKU ZMIAN WSKAŹNIKA INFLACJI	109
Summary	119
Maciej Pichura: PORÓWNANIE MOŻLIWOŚCI INWESTYCYJNYCH WYBRANYCH OPCJI EGZOTYCZNYCH I WANILIOWYCH	121
Summary	132
Anna Romowicz: PRÓBA OCENY WYCZUCIA RYNKU PRZEZ MENEDŻERÓ W POLSKICH FUNDUSZY INWESTYCYJNYCH	133
Summary	141

Elżbieta Sojka: Z BADAŃ NAD ROZWOJEM DEMOGRAFICZNYM I GOSPODARCZYM POWIATÓW WOJEWÓDZTWA ŚLĄSKIEGO – ANALIZA TAKSONOMICZNA	143
Summary	166
Włodzimierz Szkutnik: KONCEPCJA MODELOWANIA STRUKTURY ZABEZPIECZEŃ W ZARZĄDZANIU EKSTREMALNYM RYZYKIEM.....	167
Summary	177
Włodzimierz Szkutnik: ZARZĄDZANE PRZEWIDYWANIE NIEWYPŁACALNOŚCI FIRM UBEZPIECZENIOWYCH – ASPEKT STATYSTYCZNY	179
Summary	199
Alicja Wolny-Dominiak: SZACOWANIE POZIOMU ZMIENNYCH TARYFIKACYJNYCH W UBEZPIECZENIACH TYPU NON-LIFE.....	201
Summary	209

STRESZCZENIA

STOCK PRICES IN DSGE MODELS WITH PRODUCTION

Summary

The paper investigates to what extent contemporary macroeconomic models are able to explain jointly macroeconomic aggregate fluctuations, stock prices and their links. Especially, it focuses on the excess return predictability and leading indicator properties. Standard RBC and classic Jermann's model as well as the new ideas: long-memory habits, long-run consumption risk and consumers' heterogeneity have been analysed. It is shown that usually the level and volatility moments of the main variables generated by the models are close to their empirical counterparts whereas moments referring to the predictability and leading indicators differ significantly from observations.

THE ANALYSIS OF DEMOGRAPHIC RISK IN POLAND AND IN THE SELECTED EUROPEAN UNION COUNTRIES

Summary

The article includes a detailed analysis of the selected group of the statistical and demographic parameters which influence the formation and the direction of the changes of demographic risk considered with reference to social insurance. The analyses were carried out simultaneously for Poland and several selected European Union countries in order to establish the possible similarities or differences in the dynamics of change in the considered parameters.

COST ANALYSIS IN POLISH INSURANCE COMPANIES IN 2003-2007

Summary

The analysis of the most important cost positions in life insurance companies and non-life insurance companies for 5 year time period, i.e. from 2003 to 2007 has been presented in this paper. This study lets us notice that paid claims, acquisition costs, and administrative costs have bigger share in the total costs in non-life insurance companies than in life insurance companies. In life insurance companies the paid claims are rising but administrative costs are falling, especially for non-life insurance companies.

EFFICIENCY OF THE NEURON NETWORK IN THE ANALYSIS BASED ON THE EXAMPLE OF THE WARSAW GPW COMPANIES

Summary

The article describes the methodology of the network. The example of the optimising portfolio structure of an insurance company has been used to show how the above-mentioned method works.

SECURITIZATION OF THE ECONOMIC RISK BASED ON THE MRD INDEX TAKING INTO ACCOUNT THE WEATHER CONDITIONING

Summary

Unexpected floodwater is a major source of natural risk in Poland. Polish insurance markets are not developed to absorb the flood shocks. This paper has explored the possibility of engaging the capital markets for absorbing the natural disaster risk. We try to develop a basic framework for securitising flood risk via flood options. The flood options have been tried by defining the underlying variable in terms of Millimeter Rainy Days (MRDs).

COMPARISON OF THE INVESTMENT POSSIBILITIES USING VANILLA AND CHOSEN EXOTIC OPTIONS

Summary

This paper presents an outline of information about exotic options, especially concerning barrier options. Then pricing methods of European and chosen barrier options have been shown. The main goal of the article is a comparison of the investment possibilities using barrier and European options. The proposed methods of pricing and investment have been checked on the synthetic options on WIG20 index based on real historical data from period of 26/06/1998-19/09/2008.

The results of an empirical analysis carried out may lead to the conclusion that in the analysed period the investments based on the barrier options portfolios gave much higher returns.

APPLICATION OF PESARAN-TIMMERMANN TEST IN THE FORECAST OF THE DIRECTION CHANGE OF THE INFLATION RATE

Summary

In this article one of the methods of calculation of the qualitative forecast of inflation rate – the method based on Pesaran-Timmermann test has been described. The reduced rank autoregressive models have been used in the analysis.

ATTEMPT OF THE ESTIMATION OF THE MARKET SKILLS OF POLISH PORTFOLIO MANAGERS

Summary

In modern investment theory there are two kinds of risk: market risk associated with the aggregate market returns and specific risk associated with the individual assets. Systematic risk is a risk connected with a whole market and cannot be reduced within a portfolio. Specific risk can be reduced through diversification.

One of the approaches to the estimation of the portfolio managers' forecasting skills is a division into two components: identifying market timing and selection ability. In order to estimate the skills of Polish portfolio managers two models are suggested: Treynor-Mazuy model and Bhattachary-Pfleiderer model. Both of them are CAPM-based market-timing and selectivity models.

STUDIES ON DEMOGRAPHIC AND ECONOMIC DEVELOPMENT OF THE SILESIAN VOIVODSHIP DISTRICTS – TAXONOMIC ANALYSIS

Summary

In the article a taxonomic analysis of the Silesian voivodship districts has been carried out in terms of the level of demographic and economic development using an aggregative indicator of development. The dynamics of the calculated indicators in years 2000-2006 has also been examined. The results show that there is no direct compliance between economic and demographic development of the Silesian voivodship districts.

AN IDEA OF MODELLING INNOVATIONS IN EXTREME RISK MANAGEMENT

Summary

The model innovations described in the article are applied in management of catastrophic risk in order to address the specific needs that occur in insurance market. However, these innovations are not likely to become restricted to an individual insurance area. Civil liability risk poses the same challenges for insurers as catastrophic risk and, even though temporary features of civil liability threat may be various, there are also problems concerning moral hazard credit and risk that may be a subject to other forms of contracts than traditional hedging. Three discussed innovations: lack of compensation contract, rollover of the unforeseen expenses and remission of a debt- present the characteristics of plans of contracts which can be also applied to civil liability as well. In another area of managing the collective risk of an entity not connected with insurance, i.e. with a direct interest of insurers, significant innovations have been experienced, most of which resemble those for insurer catastrophic risk.

METHODS OF PREDICTING THE INSURER'S INSOLVENCIES

Summary

The article presents the issue of insolvency of the insurance companies in three systems of estimation. The basic system based on the indicator of the insurance company financial strength RBC is the simplest one, however, it fails to include all cases of insolvency detection in a way adequate to market reality. The second system, system FAST, based on the scenarios that describe the variable financial conditions in the company, from the most favourable to the worst ones, is more insurer-friendly but it does not provide explanation in forecasting insolvency such that should be expected in practice. All the cases when the company has the capacity for the financial survival and is not able to survive, identified respectively as the company insolvency and solvency, are adverse both for the company and for insurance market. The introduction of the variables of means flow significantly improves the estimation system of insurance companies insolvency. Moreover, the application of testing based on the operational features of ROC recipient enables the comparison of systems and the selection of the most advantageous one in the given conditions.

EVALUATION OF THE LEVEL OF THE RATING VARIABLES IN NON-LIFE INSURANCES

Summary

Insurance companies specialising in casualty insurance create their own rating systems for setting fair premiums for every risk for different kinds of insurance portfolios. The rating system is mostly based on the data analysis concerning the number and the value of claims for individuals or groups (classes) of the insured people within a given portfolio. The goal of this paper is to present a simulation procedure which allows to evaluate different variants of rating systems which are created using generalized linear models (GLMs) and assume different claims' distributions. The procedure is based on the Monte Carlo method and it results in the distributions of GLM parameters for rating variables, estimation of the average value of claims and the errors of estimation. The calculations were conducted using the statistical software R.