

Studia Ekonomiczne 76

STATYSTYCZNO-DYNAMICZNE MODELE ZARZĄDZANIA RYZYSKIEM EKONOMICZNYM PROGNOSTYCZNE UWARUNKOWANIA W GOSPODARCE I ANALIZACH SPOŁECZNYCH

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STRESZCZENIA

MODEL CONTROVERSIAL AXIOLOGICAL CONTEXT OF RATIONAL EXPECTATIONS IN ECONOMICS

Summary

The article presents selected aspects of the controversial axiology of rational expectations in the background generally recognized perception of economic models and their exemplification. Uncertainty and volatility risk in the dimension of economic processes are presented in general presented the processes of globalization, competition and innovation. The role of the market is mentioned in the context of perfect competition in terms of economic mega risks. Introductory considerations are in any kind of detailed statistical and econometric terms of economic and financial matters dealt with in formal terms, a model. The need for a holistic view of the ongoing social and economic processes is prompted research into the condition of the economy on a global basis, taking into account regional differences.

GENERALIZED MBP RATEMAKING IN COMMUNICATIONS INSURANCE

Summary

The paper discusses the a priori ratemaking, which is used to build systems of tariffs for non-life insurance companies. In practice, most companies use generalized linear models GLM. But often in order to better understand the nature of the data, it is useful to reach the preliminary analysis of the simpler methods of ratemaking called the minimum bias procedures MBP to allow for estimating the level of tariffication variables by minimizing the bias function. The paper presents the generalized method of MBP, which allows to easily make a quick analysis of pre-classifying the portfolio into groups of uniform tariffication. Uses an iterative algorithm for determining indicators of the impact of tariffication variables with different combinations of parameters, which are implemented in a computer program R.

VALUATION OF STRUCTURED PRODUCT AS AN EXAMPLE OF STRUCTURED DEPOSITS STABLE ZLOTY

Summary

Structured products are one of the most flexible modern investment instruments. This type of investment is nothing but a 'packed' in a box of investment strategy, designed based on derivatives (options and to a lesser dimension swap'y), characterized by complete or partial guarantee of the invested capital, assuming the transaction until its collapse. Structured products offered on the Polish market may have various legal forms.

Structured product may be offered in the form of bank deposits, certificate of deposit, life insurance, closed-end investment fund, a Luxembourg fund, bond or investment certificate. The article attempts to estimate the profit from investments in structured products on the Polish financial market. The object of study is structured deposit issued by mBank, whose index of fixing the basic rate of EUR/PLN announced by the NBP.

FORECASTING FOR MANAGING OPERATIONAL ASSETS

Summary

The fundamental questions poses by managers usually concern future operational activities. The only one possible way of achieving this information is to make accurate forecasts. In general there are two parallel ways of building forecasting models – one is based on data exploration and second is based on data explanation. The hypothesis of this research assumes that it is possible to build corporate models of financial variables in respect to the nature of the relevant phenomena. To test this hypothesis Author has build models of variables included in working capital.

SPATIAL-TEMPORAL ANALYSIS OF LABOUR MARKET IN POLAND WITH SPECIAL CONSIDERATION OF THE PROBLEM OF UNEMPLOYMENT

Summary

Spatial-temporal analysis of the situation on labour market in Poland in province approach is the main purpose of the paper. Time changes in fundamental rates related to economic activity of the population of Poland with special consideration of the problem of unemployment, particularly the long-term unemployment, were analysed. Distribution of unemployed by age, gender, education and period of unemployment were studied. On the grounds of performed analysis, a profile of a typical unemployed person in Poland can be presented. Usually, it is a person without job seniority, more often a woman. One out of three unemployed people is a person with junior high school education at the most. Unemployment mainly refers to young people, and in 2008 a half of them were no more than 35.5 years old.

In the second part of the article, an attempt to perform a comparative analysis of provinces with respect to situation on labour market in 2000 and 2008 was made with application of a synthetic indicator for this purpose. This allowed for linear arrangement of provinces from „the best” to „the worst”, according to diagnostic features selected for the study. The study showed that the best situation on the labour market was observed in Mazowieckie province, and the worst in Warmińsko-Mazurskie province, in both studied years.

ARBITRAGE OPPORTUNITIES IN THE WARSAW STOCK EXCHANGE ON THE FW20 CONTRACTS MARKET

Summary

Financial turmoil after the collapse of Lehman Brothers forced investors to analyse incoming information more careful than ever before. This common behaviour should result in improvement of stock market efficiency defined as the lack of profitable opportunities that could be exploited without adequate risk (arbitrage opportunity).

The aim of the article is to verify if there were possibilities of arbitrage strategies implementation in the Warsaw Stock Exchange. Strategies cash-and-carry and reverse cash-and-carry for futures contracts FW20 were examined. The last financial crisis (2007-2009) was especially analysed in the areas of base value, overvaluation value or undervaluation of market price of the contract compared to its theoretical value and arbitrage abilities.

ASSET PRICES AND THE COST OF ECONOMIC FLUCTUATIONS IN POLAND

Summary

In the paper the method of measuring costs of business cycle fluctuations developed by Alvarez and Jermann (Using Asset Prices to Measure the Cost of Business Cycles, „Journal of Political Economy”, 2004, vol. 112, no. 6) is presented. The method is based mainly on asset prices data and doesn't need any assumptions regarding the utility function. Therefore it offers interesting alternative to parametric approaches. The results obtained for Polish data are consistent with Alvarez and Jermann's ones but reveal potential vulnerability to changes in the length of a measurement period, for example when switching from yearly to quarterly data.

PROBLEMS OF AGING OF THE LABOR MARKET – STATISTICAL ANALYSIS-DEMOGRAPHIC FOR SELECTED EU COUNTRIES

Summary

This paper will present the results of detailed analysis of the basic parameters characterizing the dynamics of the labor market or the economic activity rate, employment rate, unemployment rate and long-term unemployment rate of workers aged 50-64 years for groups of countries newly joining the European Union. The

analysis covers the next design trend function of these parameters is also an estimate of their value over the coming years designated several independent methods. A separate part of the development of an assessment of the impact parameters characterizing the labor market for basic economic and social processes.

ASYMMETRIC VOLATILITY MEASURES AND INVESTMENT EFFICIENCY – CHOSEN APPLICATIONS IN CAPITAL MARKETS

Summary

This article shows chosen issues concerning volatility asymmetry on capital markets. I detail, it turns attention on Polish stock exchange in period between 2000 and 2010, which is additionally divided into rising and descending market periods. Asymmetric volatility measures have been used to describe adjusted beta coefficients. These coefficients have been named sensitivity factors and they have been used to classify stocks regarding yearly average rate of return.

Analysis of stock return dependency on their prices sensitivity to market volatility may result in assuming that presented coefficients give chance, in most cases, to find groups of stocks which prove to have extraordinary rates of return. Beta coefficient based on downside volatility measures seems to have biggest cognitive value. It is boldly visible especially when analyzing down-trending market. The results that have been obtained in this research may also lead to assumption that stocks being very sensitive to negative market volatility tend to give so called risk premium.

TRANSPORT INSURANCES AS BASIC PRODUCTS SOLD AT POLISH INSURANCE MARKET

Summary

The article considers the problem of insurance operation in Poland. It was noted that their participation in the Polish insurance market is still high compared to other EU countries with a high level of economic development. Conducted a brief statistical analysis separately for the insurance and liability insurance AC and compared these two groups, especially their profitability and loss ratio, and some trends associated with such processes as the impact of insurance premiums, the flow of claims and the use of reinsurance for these classes. The article ends with conclusions and observations about Polish conditions and future development.

EFFECT OF BASE RATE AND THE RISK OF MORAL HAZARD ON THE PRICE OF CAT BONDS AND PAYMENT

Summary

The application of financial instruments of the capital market is aimed at managing the process of securitization of catastrophic risk. It is significant with regards to the results that stem from the loss caused by catastrophic phenomena. The article discusses the structure of CAT bonds and their pricing on the basis of the model of stochastic process of interest rate. CAT bonds are designed for financing the results of catastrophic events. They are similar to contingent claim CC, however, in reality, they are instruments of the financial market – catastrophic bonds.

The elaborated approach is illustrated by distribution of bond prices in the arrangement of the level of launching CAT bond remission and its variability. The article investigates the direction of research determined by the consideration of moral hazard and base risk (market risk) in the pricing.

In the sequence of cases considered in the article the prices of CAT bonds with the default risk are estimated. There is also the analysis of premium in the conditions of default risk that is changing along with the amount of claims caused by a given catastrophic event, variability of loss, flexibility of interest rate of the insurer assets, coefficient of initial capital and the structure of liabilities. The premium is estimated also with regard to the influence of moral hazard upon prices (value) of CAT bonds. In this context, it is stated that moral hazard significantly lowers the value of bonds. The intensity of influence of moral hazard increases together with the intensity of a catastrophic event, variability of loss and also the interest rate risk of the insurer assets and it is decreases along with the level of launching bond payment and the initial value of the insurer capital.

REGRESSION AND STATISTICAL MODELING OF DYNAMIC AND VARIATION IN PRACTICE, RISK ASSESSMENT, CAPITAL INVESTMENTS AND INSURANCE

Summary

Discussed in the article typical stochastic-dynamic models are formulated taking into account the volatility of asset returns and allow for longer term development of appropriate indicators evaluating forecasting profitability of assets. Some models, such as known from the literature SV model, aimed to illustrate the idea of the profitability analysis of assets and simultaneously indicate its generalization property. Issues are dealt with very extensively analyzed using several analytical tools. The multiplicity of models that are applicable in the study of variation of assets due to the significance of the issues studied. For economic development, stable and saddled with limited risk, the undeniable importance of risk and volatility implying the uncertainty, though in the real economy is the primary impact of these opposite magnitude. Interpenetration of financial markets and economic markets requires the development of new analytical techniques for the study of various quantities characterizing the relationship between these markets. In the second part of the article presents the analysis within a session (with English intraday) volatility of the value of futures contracts on WIG20 USD and the date of exercise session 09.19.2008 dating from 15/10/2007 to 19/09/2008. Illustration of empirical models presented, allowed to formulate the conclusion that they can be a useful tool in the study of variation in the financial markets, in particular, phenomena characterized by high frequency changes.

ESTIMATION OF SECURITIZATION AS A PROCESS INFLUENCING FINANCIAL STABILITY OF THE BANKING SYSTEM

Summary

The article presents considerations concerning securitization in relation to the concept of financial stability of the banking system. The very process of securitization has been widely used in developed countries, both in banking and insurance. After the recent financial crisis this process has slowed down and is even indicated as a source of collapse. Based on theoretical considerations, literature studies, and specific operational scenarios, has been made an attempt to verify this hypothesis. For this purpose, special attention is paid to increasing the supply of credit and appropriate accounting policies with regard to credit risk. The next section highlights the level of debt, market value and risk in the financial system of the bank. At the end, lending boom is characterized, and are given the conclusions coming out of studied accounting scenarios.