

## SUMMARIES

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Marianna Księżyk: **Fundamental sources of the current global crisis** ▪ *Ekonomia Menedżerska* 2010, nr 7

**Keywords:** *recession, equilibrium in global market*

The article characterizes sources of the current global crisis, such as ignoring the basic laws of economics, lack of a global currency at a fixed and secured rate, creation of money out of nothing and lack of a framework for the market to work.

Joanna Duda, Michał Molenda: **The role of quality in building competitive position of polish enterprises from SME sector** ▪ *Ekonomia Menedżerska* 2010, nr 7

**Keywords:** *competitive position, competitiveness, competitiveness factors, quality management system*

Since the moment of Poland entry into the European Union structures the competitiveness of Polish SME sector became the subject of wide discussions. Since the beginning of the market transformation entrepreneurs encountered and still encounter a lot of barriers impeding them running their businesses in both operational and investments manner. A price was and still is the main factor in building a competitive position. Whereas other factors like quality of products or narrow specialization had less meaning, what induce a discussion about the competitive position of Polish SMEs. That is why in this paper, on the basis of the survey conducted by PKPP Lewiatan and the survey carried out by the author among small and medium enterprises functioning in Malopolska region which obtained financing from European sources, an attempt was made to define the role of widely understood quality in building the competitive position of these enterprises. In both cases a research method was a questionnaire survey.

Rafał Kusa: **Social responsibility of non-profit organizations** ▪ *Ekonomia Menedżerska* 2010, nr 7

**Keywords:** *corporate social responsibility (CSR), non-profit organizations, stakeholders, organization's responsibility*

The selected aspects of the social responsibility of non-profit organizations are presented in the article. The analyze is based on the concept of corporate social responsibility. Firstly, the concept of CSR is introduced and specific activities are presented. Then the non-profit organizations are described. Afterwards the analyze of social responsibility of non-profit organization is conducted, with focus on stakeholders' groups: beneficiaries, members, employees, sponsors and society. The analyze shows the universality of CSR concept and its relevance to the concept of organization's responsibility.

Ingo Klein, Christian Köck, Fabian Tinkl: **Spatial-serial dependency in multivariate GARCH models and dynamic copulas: a simulation study** ■ *Ekonomia Menedżerska* 2010, nr 7

**Keywords:** *copulas, univariate GARCH models, multivariate GARCH models*

The serial dependency of multivariate financial data will often be filtered by considering the residuals of univariate GARCH models adapted to every single series. This is the correct filtering strategy if the multivariate process follows a so-called copula based multivariate dynamic model (CMD). These multivariate dynamic models combine univariate GARCH in a linear or nonlinear way. In these models the parameters of the marginal distribution (=univariate GARCH models) and the dependence parameter are separable in the sense that they can be estimated in two or more steps. In the first step the parameters of the marginal distribution will be estimated and in the second step the parameter(s) of dependence. To the class of CMD models belong several multivariate GARCH models like the CCC and the DCC model. In contrast the BEKK model, f.e., does not belong to this class. If the BEKK model is correctly specified the above mentioned filtering strategy could fail from a theoretical point of view. Up to now, it is not known which dynamic copula is incorporated in a BEKK model. We will show that if the distribution of the innovations (i.e. the residuals) of MGARCH models is spherical the conditional distribution of the whole MGARCH process belongs to the elliptical distribution family. Therefore estimating the dependence of a BEKK model by copulas from the elliptical family should be an appropriate strategy to identify the dependence (i.e. correlation) between the univariate time series. Furthermore we will show, that a diagonal BEKK model can be separated in its margins and a copula, but that this strategy falls short of investigating full BEKK models.

Henryk Gurgul, Paweł Zając: **Distributions of daily stock returns and trading volume of companies listed in CAC40 and their changes during the finance crisis** ■ *Ekonomia Menedżerska* 2010, nr 7

**Keywords:** *financial crisis, distributions of daily stock returns, distributions of trading volume, Kolmogorov test, Anderson–Darling statistic*

This study investigates the statistical properties of stock returns and trading volume during the time directly preceding the financial crisis period and during its first few months. Authors are using stock data of companies listed in the CAC40 segment. The results are presented on a daily returns and on volumes data basis for the period from February 2008 to September 2008 and from October 2008 to May 2009. It turns out that NIG describes the log-volume and hyperbolic distributions describes stock returns in the best way, however distributions parameters values are different in both time periods. Differences are large and of big variety.

Henryk Gurgul, Krzysztof Kłęk: **Spectral analysis of stock return of companies listed in SMI index** ■ *Ekonomia Menedżerska* 2010, nr 7

**Keywords:** *spectral analysis, bivariate spectral analysis, time series, seasonality, spectrum*

The goal of this paper is application of spectral analysis to investigation of structure and frequency of time series returns of 19 companies listed in SMI index, which is main index of Swiss Stock Exchange. There was investigated by means of spectral methods if there exists dependence

among five companies representing five main sectors of Swiss economy. The results confirm the lack of such dependence. There was especially not established dependence between frequency components of time series pairs.

Henryk Gurgul, Marcin Suder: **Nonlinear dynamics of stock market indices WIG20 and ATX: comparative analysis** ▪ *Ekonomia Menedżerska* 2010, nr 7

**Keywords:** *time series, chaos, correlation dimension, BDS, Lyapunov exponents, stochastic dynamics*

This paper contains results of research concentrated at identification of nonlinear structures and deterministic chaos occurring on Austrian and Polish stock market. Taking into consideration the ATX and WIG20 indices from period I 2001–VIII 2008 and using the most popular statistical methods of uncovering the existence of chaos in nonlinear structures was indicated. Our results confirmed that in both considered cases chaos systems exist, however the number of dynamic variables required to describe the system for each index vary subtly. This value equals 6 for ATX and 7 for WIG20. Conducted analysis also brought evidence of small differences in length of nonperiodic cycles.

Anna Czapkiewicz, Iwona Skalna: **The Fama–French model for the Polish market** ▪ *Ekonomia Menedżerska* 2010, nr 7

**Keywords:** *asset pricing, cross-sectional test, Fama–French model*

The Fama-French (FF) three-factor model has been tested for the Polish stock market using the sample that spans years 2003-2007. The model is verified using the technique of rolling betas. The results show the significant impact of factors constructed based on the fundamental values such as firm size and book-to-market ratio value (BE/ME), whereas the market beta has little or no ability in explaining the variation in stock returns. The small stocks effect and the effect of stocks with big BE/ME can be noticed.