

Summaries

Jakub Bartak: **Does income inequality hamper human capital accumulation in OECD countries?** ■ *Managerial Economics* 2017, vol. 18, No. 2

JEL Classification: E24, O15, C23

Keywords: *generalized method of moments, human capital, income inequality*

The purpose of this article is to verify whether income inequality impedes the accumulation of human capital in OECD countries during the years of 1990–2010. The article reviews theoretical findings that suggest a negative impact of income dispersions on human capital, and subsequently, it presents estimations of a dynamic model of human capital accumulation. The results of the study reveal a negative and statistically significant relationship between income inequality and human capital inflow measured as student skills test scores.

Sławomir Czetwertyński: **Importance of copyrights in online society** ■ *Managerial Economics* 2017, vol. 18, No. 2

JEL Classification: K11, O34, Z13

Keywords: *copyright, online society, copy culture*

The subject matter of the considerations in this paper is copyrights and their importance in the online society. This issue was selected because of the weight of the copyrights in the access and exchange of content via the Internet and, at the same time, the relatively high rate of unauthorized copying that, in fact, translates as a breach of the copyrights. In practice, this means that copyrights (which, for the online society, are what ownership rights for the industrial society are) have no serious authority. Informal norms of the exchange of digital information goods (called the “copy culture”) are not accordant with regulations of the formal copyright institution. The main goal of this paper is to determine the importance of copyrights for relationships taking place in the online society. In the paper, a large part of the considerations regards the bi-polarity of the copyright idea that protects authors on the one hand yet prevents the so-called author’s monopoly on the other. In the course of considerations, the author made an attempt to verify the hypothesis stating that the bi-polarity of copyrights responds to the needs of the online society; however, the formal copyright institution has no such serious authority as the institution of ownership rights to tangible things. The research method applied in this paper is of a deductive nature. Considerations are based on an analysis of the copyright idea as well as on the traffic, extent, and content on the Internet – in other words, flows within the online society.

Henryk Gurgul, Roland Mestel, Robert Syrek: **MIDAS models in banking sector–systemic risk comparison** ■ *Managerial Economics* 2017, vol. 18, No. 2

JEL Classification: G15, G19

Keywords: *systemic risk measures, GARCH-MIDAS, DCC-MIDAS*

This paper shows the application of MIDAS based models in systemic risk assessment in banking sector. We consider two popular measures of systemic risk i.e. Marginal Expected Shortfall and

Delta Conditional Value at Risk. The GARCH-MIDAS model is used in modelling conditional volatilities. The long-run component is modeled using realized volatility. The conditional correlation, second step of modelling, is described with DCC-MIDAS model. This is novel approach in respect to classical TARCH and DCC modelling. Whereas the information contained in macroeconomic variables, if available, can help to predict short and long-term components, this is the promising option in improvement of systemic risk assessment.

László Pitlik, Péter Kollár, Zsolt Fülöp, Imre Madarász: **Exploring relative instances of exposure in equilibrium of migration processes based on population characteristics** ■ *Managerial Economics* 2017, vol. 18, No. 2

JEL Classification: F22

Keywords: *similarity analysis, migration potential, sustainability, automation, objectivity, socio-cybernetics*

Cybernetic states of law try to plan each activity – especially migration issues. The planning process has the following question originating in socio-cybernetics in its core: Where can it be assumed that the population characteristics are higher/lower than rational? The planning levels can be different: from the continent or country levels via statistic regions or micro-regions to settlements (even at the street and house levels). Parallel to the aggregation like population density (or annual growth rate), models can also be developed for arbitrary layers of demographical statistics, like the required ratio of males and females in different age-groups and/or education categories, etc. The models can analyze time-periods (e.g., years, time intervals) to ensure that dynamic processes will not actually be covered through static evaluation. The necessary data asset (a kind of Big Data) is given by OECD/EUROSTAT, for example. The questions and data assets are well-known. The modeling methodology consists of potential know-how: through estimations of staircase functions in the framework of online similarity analyses, regional norm values can be derived for targeted population characteristics. Therefore, the European strategy concerning the integration of massive volumes of migrants can be supported in an objective way. Analogue analyses with the same methodology have already been derived for parts of Germany and Hungary. Similarity analysis is an artificial intelligence-based approach with its own consistence-oriented quality assurance layers. The data-driven policy creation needs methodologies where objectivity is provided through optimization in the modeling based on arbitrary phenomena. The modeling philosophy should try to ensure a kind of regional multi-layered equilibrium (sustainability, cf. Kazohinia). The outlined methodology can be seen as a sort of automated SWOT analysis where each conclusion will be derived from the raw statistics in a direct way – without the risk of human subjectivity intervening in the process. The modeling spectrum consists of three levels: (1) Explorative modeling is able to derive basic characteristics for *ceteris paribus* perspectives through the complex functions. The standard analytical potential works with *ceteris paribus* parameters, based on the appropriate literature sources. (2) Anti-discriminative modeling is capable of deriving ranks for objects without an actual learning pattern, for the so-called production functions. (3) A cybernetic state of law should be able to have robot-planning values supporting human decision processes. Therefore, 'freedom of press' is basically the capability to explore and publish objective force fields and not to catalyze the spread of subjective evaluations.

Milena Suliga: Price reversal as potential expiration day effect of stock and index futures: evidence from Warsaw Stock Exchange ■ *Managerial Economics* 2017, vol. 18, No. 2

JEL Classification: G14, G23

Keywords: *futures contracts, expiration day effects, price reversal, abnormal returns, event study methodology*

This paper studies an impact of futures expiration days on the Polish equity market. From three potential expiration effects appearing in the literature (namely, the increased trading volume of underlying assets, increased volatility of their returns, and price reversal after expiration), the latest one is researched in detail for expiration days of futures on the WIG20 index, the mWIG40 index, and individual stocks. The data covers the period from January 2001 to December 2016. The phenomenon of price reversal is studied with the use of regression models, price reversal measures, and event study methodology. The results obtained for expiration days are compared with the results from non-expiration days to check whether a potential price reversal can be interpreted as an effect of expiration. No price reversals after futures expirations were found in the returns of the WIG20 nor mWIG40 indexes. In the case of individual stocks, results from all of the three methods support the assumption that price reversal occurs after expiration. The reversal is immediate and is reflected in overnight returns more than in daily returns.

Stanisław Urbański, Iwona Skalna: CAPM applications for appropriate stock pricing – impact of speculation companies ■ *Managerial Economics* 2017, vol. 18, No. 2

JEL Classification: G11, G12

Keywords: *stock pricing, penny stocks, speculative stocks, return changes*

Research on the pricing of stocks listed on the Polish market shows a contradiction with the classic CAPM. The results of these studies are consistent with the results carried out on other developed markets. The reasons for inconsistent pricing are not known; this is the main objective of this work. It is a continuation of the authors' previous work on the impact of speculation and penny stocks on the pricing in light of the ICAPM. Despite the scientific justifications for pricing in light of the ICAPM, a common estimate of the capital cost for companies is still performed on the basis of the classic CAPM. It has been conjectured that speculative stocks contribute to incompatible pricing in light of the CAPM. The elimination of speculative stocks would allow for the proper estimate of the cost of capital without the need of complicated and laborious ICAPM applications. The research is conducted on the basis of stocks listed on the Warsaw Stock Exchange from 1995 through 2012. The tested period is divided into two separate sub-periods: 1995–2005 (the years preceding Poland's accession to the EU) and 2005–12 (the years of Poland's membership in the EU). The analyzed stocks are grouped into quintile portfolios according to two variants. The pricing tests are carried out in three modes. In Mode, 1 all listed stocks are analyzed. In Modes 2 and 3, speculative stocks are excluded from the study. The research results prove the validity of the adopted conjectures.

Małgorzata Wosiek: Human and social capital facing challenges of economic convergence processes in Poland ■ *Managerial Economics* 2017, vol. 18, No. 2

JEL Classification: O15, P48, R11

Keywords: *human capital, social capital, regional convergence*

The article deals with the study of the role of human and social capital in shaping the processes of regional development in Poland in 2002–2014. The study is aimed at seeking answers to the question whether and to what extent the characteristics of human and social capital development impeded or fostered the achievement of convergence in living standards (GDP per capita) in regional systems (NUTS-2). The following tools were used: multidimensional statistical exploratory analysis – the cluster analysis (Ward’s, k-means), linear ordering – as well as correlation analysis and measures of statistical dispersion. The analysis confirm a stronger link of the processes of economic development in Polish regions with human capital than in those with social capital, whereby there is evidence indicating that it was rather a higher level of the economic development that stimulated changes in human capital and the reverse impact of human capital on the change in the GDP per capita was weaker. When it comes to the educational component of human capital, it can be assumed that this component of human capital could have had a more polarizing than converging impact. The social capital did not mitigate nor strengthen the polarizing impact of human capital. There was, therefore, no confirmation to the hypothesis that intangible factors – human and social capitals – contributed to the convergence in living standards among regions in Poland in 2002–2014.