



Editorial for the Special Issue: “Advances in Statistical Modelling for Economic Policy-Making” in Croatian Review of Economic, Business and Social Statistics

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We are very delighted to present the special issue of *Croatian Review of Economic, Business and Social Statistics (CREBSS)* on advances in statistical modelling for economic policy-making. CREBSS is the first statistical journal established in Croatia and published by *Croatian Statistical Association (CSA)*.

Statistical modelling is essential for analysing various aspects of economic policy. Economic policy analysis has evolved considerably over decades with the development of statistical modelling. There are often public debates regarding the adequate responses of economic policy makers to economic fluctuations. Sound statistical modelling should provide the basis for appropriate decision-making at macro and micro level, and thus the issue of statistical modelling gains in importance.

This special issue brings nine papers that cover using statistical research methods and models for the analysis of fiscal, monetary and energy policy, health and sports quantitative analysis, survey methods and price indices as well as digital society analysis.

In the field of using statistical methods in fiscal policy making, Noveski (2018) brings the interesting analysis of the impact of budget deficit on economic fluctuations in the Republic of Macedonia, supporting the Ricardian equivalence theory. Namely, research outlines that budget deficit does not have statistically significant impact on GDP per capita. Moreover, Kanlić and Abdić (2018) assess the correlation among data on value added tax turnover available from monthly survey with data obtained on macroeconomic level in Bosnia and Herzegovina. Authors did not find statistically

significant difference in the results produced from these two sources. Results contribute to optimization of providing statistical data through reducing survey conducting costs.

Moreover, this issue brings the econometric analysis of monetary, namely exchange rate policy in Croatia, Serbia and Macedonia. Bucevska and Mojanoski (2018) use vector error correction modelling to analyse the determinants of real exchange rates in three mentioned countries. They indicate that vector error correction modelling of exchange rate and selected determinants is proper for the case of Croatia, while for Serbia and Macedonia it is not adequate.

Regarding using statistical methods for analysing energy policy, the paper of Zekić-Sušac et al. (2018) assesses whether clustering procedure enhances the performance of neural networks in predicting energy efficiency of public buildings. Authors conclude that the prediction accuracy is not increased by clustering. Furthermore, this issue brings the analysis of the impact of probabilistic sampling strategy on quality of price indices provided by Croatian Bureau of Statistics authored by Seljak et al. (2018). Authors point out that in industries with low concentration the ignorance of service prices of small units could distort price indices notably.

The paper of Gheno (2018) tackles the problem of many patient cancellations in health sector and presents a new Bayesian method for estimating the probability of the cancellation of the health visits based on specific factors such as age. The proposed method is applied to the real case and compared to various methodologies.

Two papers in this issue address finance and labour issues in sports economics. Fűrész (2018) examines the existence of correlation between the European football clubs' activity in the transfer market and their profitability of transfers. The research indicates that the economic profit from transfers does not depend on the amount of transfers. Rappai and Fűrész (2018) analyse how to deal with heteroskedasticity in athletes' labour demand functions. Mentioned paper examines footballer transfer fees in top European leagues and pinpoints a threshold for which the traditional market mechanisms are not appropriate. World-class athletes can be considered prestige goods for which demand may be irrational.

Knowing that this century belongs to the digital economy, meaning that we all witness the increase of online businesses and e-commerce for goods and services, and recognizing the digital society provides new opportunities and challenges for companies and their employees (see Mondekar, 2017), Žmuk and Mihajlović (2018) analysed how economic and digital development level indicators influenced the percentage of individuals who were recently booking online for travel and accommodation in European countries. Since the digital economy has given especially huge challenge in Southeast Europe, the authors were focused on the selected Western Balkan countries. The outcomes of the research might be useful to developers of economic strategy to shape even better digital future concerning the impacts on e-commerce and online booking across the analysed countries.

Finally, we believe that this special issue will provide interesting basis and open the perspective for further research of various aspects of economics using statistical methods and models.

References

1. Bucevska, V., Mojanoski, G. (2018). Identifying the determinants that cause the value movements of currencies Denar, Kuna and Dinar. *Croatian Review of Economics, Business and Social Statistics*, Vol. 4, No. 2, 2018 – This issue.

2. Fűrész, D. I. (2018). Correlation between profitability and transfer activity in European football. *Croatian Review of Economics, Business and Social Statistics*, Vol. 4, No. 2, 2018 – This issue.
3. Gheno, G. (2018). A new link function for the prediction of binary variables. *Croatian Review of Economics, Business and Social Statistics*, Vol. 4, No. 2, 2018 – This Issue.
4. Kanlić, F., Abdić, A. (2018). The Short-Term turnover estimates in Bosnia and Herzegovina based on the VAT data. *Croatian Review of Economics, Business and Social Statistics*, Vol. 4, No. 2, 2018 – This issue.
5. Mondekar, D. (2017). *The Digital Economy in Southeast Europe: Opportunities and challenges*. Friedrich-Ebert-Stiftung, Regional Office for Croatia and Slovenia, Zagreb.
6. Noveski, M. (2018). Macroeconomic effects of the budget deficit in the Republic of Macedonia. *Croatian Review of Economics, Business and Social Statistics*, Vol. 4, No. 2, 2018 – This issue.
7. Rappai, G., Fűrész, D. I. (2018). Handling heteroskedasticity in labour demand functions of athletes. *Croatian Review of Economics, Business and Social Statistics*, Vol. 4, No. 2, 2018 – This issue.
8. Seljak, R., Bregar, L., Colić, S., Dozet, M. (2018). Probabilistic sampling strategy as a means of improving quality of price indices. *Croatian Review of Economics, Business and Social Statistics*, Vol. 4, No. 2, 2018 – This issue.
9. Zekić-Sušac, M., Scitovski, R., Has, A. (2018). Cluster analysis and artificial neural networks in predicting energy efficiency of public buildings as a cost-saving approach. *Croatian Review of Economics, Business and Social Statistics*, Vol. 4, No. 2, 2018 – This issue.
10. Žmuk, B., Mihajlović, I. (2018). Online booking for travel and accommodation influenced by economic and digital development level: Position of the Western Balkan countries within Europe. *Croatian Review of Economics, Business and Social Statistics*, Vol. 4, No. 2, 2018 – This issue.

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