Top-Quality and Useful Guide through Statistical Methods and Excel Applications

Stanislava Hronová¹ | University of Economics, Prague, Czech Republic

MAREK, L. et al. *Statistika v Příkladech*. 1st edition. Prague: Professional Publishing, 2013. ISBN 978-80-7431-118-5.

Bookshops specializing in technical literature started to offer this spring a new publication called Statistics in examples which is a joint work of a team of authors of the Department of Statistics and Probability of the University of Economics in Prague, headed by **Luboš Marek**.² The book is published by **Professional Publishing**.

Presented publication is a top-quality collection of examples of the areas covering fundamental statistical course for non-statistical studies at universities of economic specialization. Out of the area of social and economic issues suitable examples are selected. The book is divided into 8 application parts (Descriptive Statistics, Probability, Sample Surveys, Contingency Tables, Analysis of Variance, Regression and Correlation Analysis, Time series, Index Numbers). The work offers also not only inevitable statistical tables of distribution function of standard normal distribution and critical points of selected probability distributions but also very well prepared chapter presenting probability distributions in MS Excel. This chapter is in fact a brief and



comprehensible manual providing for easy orientation in work with probability divisions in MS Excel.

I consider the choice of MS Excel with the aim to simplify the work with statistical data as beneficial since this application is available to any user of MS Windows. The relation of calculation corresponding to the use of basic statistical methods to special applications showed difficult for current users and prevented those who did not possess these applications to master modern methods of processing and data analysis. Good relation between the explanation of statistical methods and processes in Excel was

¹ Nám. W. Churchilla 4, 130 67 Prague 3, Czech Republic. E-mail: hronova@vse.cz.

² Other authors are the following: Iva Pecáková, Michal Vrabec, Tomáš Löster, and Adam Čabla.

significantly contributed to also by extension of statistical functions and quality changes in terminology in MS Excel version 10.

The concept of the book is based on experience of authors gained at the process of university teaching of basic statistical methods but also on the efforts to present processes, in compliance with the explanation³ what is the potential of statistical methods. Arrangement of chapter, applied examples, presentation of Excel tables – all these items show high technical and pedagogical erudition of the authors and make the assessed book a useful tool of knowledge. The concept of chapters is very valuable especially in terms of pedagogical application. Statistical methods are presented to readers in form of examples and the substance of the method is shown first as an "ordinary" calculation i.e. without the use of a (special function) in Excel. Only after the reader catches the substance of the method and selected processes with which he reached the correct result it is shown how the same task can be solved in Excel. I consider this approach pedagogically correct and very helpful.

The structure in form of thematic chapters and the use of Excel solutions enables the reader to gradually master basic statistical processes and to understand also more complex parts. Top-quality explanation of statistical methods by means of examples is completed by very good graphics not only in form of various functions (in parts devoted to Sampling and Time Series) but also in preprinted dialogue boxes in Excel. All these factors enhance read-ability and comprehensibility of presented publication. Minor shortcomings can be found perhaps in not always completely unified graphic form of tables (chapters Contingency tables and Regression and Correlation Analysis versus other chapters) or in sometimes excessive use of italics in the description of variables (chapter Sample Surveys).

Publication Statistics in Examples is undoubtedly a book of high quality designed both for students of economic universities and for professional in practice wishing to grasp problems related to the application of basic statistical methods. Assessing the technical, pedagogical, content and graphic aspects it corresponds to requirements put on modern publications.

³ The book dealing with thereof was compiled by Hindls, R., Hronová, S., Seger, J., and Fischer, J. is called: *Statistika pro ekonomy*. 8th edition, Prague: Professional Publishing, 2007. ISBN 978-80-86946-43-6.