1

Editorial

Let's sing a song about statistical models

Statistics is full of models; they are everywhere. Whether designing an experiment, analyzing the results, or predicting, statisticians use models. Models can help us improve estimation. They can help us understand what underlies a process studied. They can help us predict future situations and actions. Economics, engineering, biology, ecology, health sciences, and other research fields, all are full of models.

Models are full of traps, though. One has always to be aware of this, no matter if one predicts or explains, applies a standard model or looks for the best model, is a statistician or just a user of statistics. "No one should believe that a model could be true, although much of the theoretical statistical inference is based on just this assumption," says J.K. Lindsey [1]. But, in the words of H. Theil [2], "Models are to be used, not believed", a meaningful statement indeed. Using models is harder than believing in them; while the former requires knowledge, the latter does not. Perhaps it is for exactly this reason that all the various models, those so simple and common, those so complicated, those with unrealistic assumptions, those linear and nonlinear, they all can give the user much enjoyment. Modeling is fun indeed; this is a game with many players throughout the world. Besides, can anyone imagine contemporary statistics without models?

This is why, like all issues of Model Assisted Statistics and Applications, the current one, starting a new, third volume, is assisted by plenty of models.

Marcin Kozak
Co-Editor-in-Chief

References

- [1] J.K. Lindsey, Applying Generalized Linear Models, Springer-Verlag, New York, 1997.
- [2] H. Theil, *Principles of Econometrics*, John Wiley, New York, 1971.