

Editorial

Günter Fandel¹

Published online: 15 January 2016
© Springer-Verlag Berlin Heidelberg 2016

At the end of the year 2015 the 85th volume of the Journal of Business Economics (JBE)/Zeitschrift für Betriebswirtschaft (ZfB) has been completed. On this occasion the current issue is published. It contains the papers which have been presented on a symposium at the University of Hagen in February 2016 to mark the jubilee.

The history of the journal started with Fritz Schmidt who established the German speaking Zeitschrift für Betriebswirtschaft in 1924. He was the editor-in-chief of the first 19 volumes which were published from 1924 to 1942 by Industrieverlag Späth und Linde in Berlin. 13 highly respected scientists of business administration and management science from Japan, Austria, Germany and The Netherlands were co-editors in this time. Subsequent editors-in-chief were:

Wilhelm Kalveram, 1950–1951,
Josef Löffelholz (publishing editor, Gabler), 1951–1963,
Erich Gutenberg, 1964–1978,
Horst Albach, 1979–2000,
Günter Fandel, since 2001.

As a consequence of World War 2 the publishing of Zeitschrift für Betriebswirtschaft was discontinued and the new edition of the journal was transferred to Gabler in Wiesbaden starting with the 20th volume. From 2004 on the structure of editing was changed in the way that department editors were established to minister different topics of management science.

✉ Günter Fandel
guenter.fandel@fernuni-hagen.de

¹ Center for Production Economics and Decision Support, FernUniversität in Hagen, Universitätsstr. 41, 58084 Hagen, Germany

In 2013 the *Zeitschrift für Betriebswirtschaft* was transformed into the international English speaking *Journal of Business Economics* and is published by Springer now. In the second half of 2015 the editorial board was augmented by about 20 younger scientists supporting the department editors. The journal aims to link science with practice, especially allows young scientists room to publish their recent results and is ranked internationally as a B-Journal. The acceptance rate of submitted papers amounts after some rounds of a double-blind refereeing process to about 30 %.

The nine contributions of this issue are devoted to different areas of decision making in management science.

Miettinen and *Ruiz* present a framework of methods for multi-objective optimization without assuming Pareto optimality of the alternatives discussed from the very beginning in their paper. The framework consists of different modules to elicit the preferences of the decision maker and to optimize the solution by approaching the Pareto optimal set from an inferior point.

Stewart deals with the problem of selecting a portfolio of research and development projects under resource constraints by applying multi-objective optimization. The combinatorial problem will be solved by a reference point approach implementing a special genetic algorithm in order to obtain the solution numerically.

Sinah, *Korhonen* and *Wallenius* suggest a preference-based method to calculate the probability of finding better alternatives than those considered in the original multiple criteria data sample. To ascertain the probability the value function of the decision maker in terms of different criteria is estimated.

Corrente, *Greco*, *Matarazzo* and *Slowinski* apply the robust ordinal regression approach to decisions under risk and uncertainty in their paper. They reformulate the problems in forms of multiple criteria decision aiding by considering a set of quantiles of the outcome distribution which are meaningful for the decision maker.

The paper of *Bischoff* and *Jahn* deals with risks and uncertainties in decision making concerning to operate a wind power station. Convex combinations of Weibull distributions are the basis of a general model to describe the distributions of wind speeds. Additionally, a new approach of error propagation is presented.

Utz, *Weber* and *Wimmer* estimate a cross-sectional model of the yield spreads of German Mittelstand bonds as a function of liquidity measures and further variables characterizing the issuing firm and the bond. The results show a significant positive effect of illiquidity on the yield spread.

Koch and *Wäscher* analyze the order batching problem how different customer orders should be grouped into picking orders to minimize the total length of all necessary tours. The authors introduce a special grouping genetic algorithm to solve the problem and to get high quality solutions in reasonable computing times.

Fiala deals with the question how auctions can be applied to coordinate agents in a supply chain. For this case a complex trading model is proposed based on multi-dimensional auctions which can be formulated as mathematical programming problems. The iterative solution procedure implements primal-dual algorithms.

The article of *Fandel* and *Trockel* focuses on the question how optimal decisions in a two-firm supply chain can be determined and influenced when the lot-size

planning of the two firms is expanded to include investment decisions and to coordinate the just-in-time delivery with the lot-size planning on the basis of the Harris or the Wagner/Whitin approach. A biform game is formulated to describe the decision situation; as solution concepts on the cooperative stage the core and the cooperative Nash solution are considered. Disposition benefits of the supplier will lead to dominant solutions.