This textbook, *Exploratory Data Analysis in Business and Economics: An Introduction Using SPSS, Stata, and Excel*, aims to familiarize students of economics and business as well as practitioners in firms with the basic principles, techniques, and applications of descriptive statistics and data analysis. Drawing on practical examples from business settings, it demonstrates the basic descriptive methods of univariate and bivariate analyses. The textbook covers a range of subject matter, from data collection and scaling to the presentation and univariate analysis of quantitative data, and also includes analytic procedures for assessing bivariate relationships. In this way, it addresses all of the topics typically covered in a university course on descriptive statistics.

In writing this book, I have consistently endeavoured to provide readers with an understanding of the thinking processes underlying descriptive statistics. I believe this approach will be particularly valuable to those who might otherwise have difficulty with the formal method of presentation used by many textbooks. In numerous instances, I have tried to avoid unnecessary formulas, attempting instead to provide the reader with an intuitive grasp of a concept before deriving or introducing the associated mathematics. Nevertheless, a book about statistics and data analysis that omits formulas would be neither possible nor desirable. Indeed, whenever ordinary language reaches its limits, the mathematical formula has always been the best tool to express meaning. To provide further depth, I have included practice problems and solutions at the end of each chapter, which are intended to make it easier for students to pursue effective self-study.

The broad availability of computers now makes it possible to teach statistics in new ways. Indeed, students now have access to a range of powerful computer applications, from Excel to various statistics programmes. Accordingly, this textbook does not confine itself to presenting descriptive statistics, but also addresses the use of programmes such as Excel, SPSS, and Stata. To aid the learning process, datasets have been made available at springer.com, along with other supplemental materials, allowing all of the examples and practice problems to be recalculated and reviewed.

I want to take this opportunity to thank all those who have collaborated in making this book possible. First and foremost, I would like to thank Lucais Sewell (lucais.sewell@gmail.com) for translating this work from German into English. It is no small feat to render an academic text such as this into precise but readable English. Well-deserved gratitude for their critical review of the manuscript and valuable suggestions goes to Birgit Aschhoff, Christoph Grimpe, Bernd Kuppinger,
Bettina Müller, Bettina Peters, Wolfgang Schäfer, Katja Specht, Fritz Wegner, and Kirsten Wüst, as well as many other unnamed individuals. Any errors or shortcomings that remain are entirely my own. I would also like to express my thanks to Alice Blanck at Springer Science + Business Media for her assistance with this project. Finally, this book could not have been possible without the ongoing support of my family. They deserve my very special gratitude.

Please do not hesitate to contact me directly with feedback or any suggestions you may have for improvements (thomas.cleff@hs-pforzheim.de).

Pforzheim

Thomas Cleff

March 2013
Exploratory Data Analysis in Business and Economics
An Introduction Using SPSS, Stata, and Excel
Cleff, Th.
2014, XXII, 215 p. 130 illus., 11 illus. in color., Softcover
ISBN: 978-3-319-01516-3