Jan Beran Yuanhua Feng Hartmut Hebbel *Editors* 

# Empirical Economic and Financial Research

Theory, Methods and Practice



Jan Beran • Yuanhua Feng • Hartmut Hebbel Editors

## Empirical Economic and Financial Research

Theory, Methods and Practice



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Festschrift in Honour of Professor Siegfried Heiler

#### **Foreword**

During the last four decades Siegfried Heiler has had a great influence on the development of Statistics in Germany and on the international community. On the one hand, he has been an active researcher. On the other hand, he held leading positions in statistical societies.

Siegfried has a wide research spectrum. His main research interests are in the fields of time series analysis and robust statistics. In many cases his research was motivated by empirical problems of relevance and he introduced new statistical methods to deal with. One of the most important examples is the Berlin Method that is inter alia used by the German Federal Statistical Office.

Over a long period Siegfried was very active in the German Statistical Society. From 1980 to 1988 he was Chairman of the Section "Neuere Statistische Methoden" renamed as "Statistical Theory and Methodology". Moreover, he was President of the Society from 1988 to 1992. This was the time of the German reunification and as well an important time for the Society. During the board meeting in Konstanz on January 19, 1990 there was an intensive discussion about the opportunity to communicate with statisticians from the GDR. The integration and promotion of this group was also topic of the board meeting in Trier on June 6, 1990. Due to the difficult implementation of regulations of the Article 38 of the Unification Treaty referring to science and research the German Statistical Society decided a Memorandum on the Development of Statistics at the Universities of the new federal states at the end of 1991. "Statistik im vereinten Deutschland" was also the main topic of the Annual Meeting of the Society in Berlin in 1991.

Very early Siegfried detected the importance of computers for statistics and particularly raised this point. In his time as President of the Society he intensified the contacts with international statistical societies. After his term as President he was Vice-President of the German Statistical Society from 1992 to 1996. Moreover, Siegfried was a board member of the European Course in Advanced Statistics over many years and its President from 1994 to 1997.

viii Foreword

Siegfried has done much for the German Statistical Society and we are deeply indebted to him for his numerous activities.

Happy Birthday, Siegfried!

Frankfurt, Germany October 2013 Wolfgang Schmid

#### **Editorial**

This edited book on recent advances in empirical economic and financial research was proposed as a Festschrift for celebrating the 75th Birthday of Prof. (em.) Siegfried Heiler, Department of Mathematics and Statistics, University of Konstanz, Germany. The contributions are written by his former students, friends, colleagues and experts whose research interests are closely related to his work. We are grateful to all authors for submitting their work, which ensured that this issue reflects the state of the art in the area. Our special acknowledgements go to Prof. Walter Krämer, Department of Statistics at TU Dortmund, Germany, and the corresponding colleagues of Springer-Verlag for kindly agreeing to publish this book in the Series "Advanced Studies in Theoretical and Applied Econometrics", which is a very suitable host for the current issue.

We would also like to thank Prof. Dr. Roland Jeske, Faculty of Business Administration, University of Applied Sciences Kempten, Germany, and a few other former students of Siegfried Heiler, who have provided us with details on his academic career and other useful information. Their kind help allowed us to carry out this project smoothly while keeping it a secret until its publication on his birthday.

Finally, we would like to thank Mr. Christian Peitz and Ms. Sarah Forstinger, both in the Faculty of Business Administration and Economics, University of Paderborn, Germany, for their invaluable help in editing this book. Mr. Peitz took over most of the technical tasks and parts of the organization. Ms. Forstinger integrated all single submissions into an entire LaTex file and, in particular, helped to retype two submissions in Word format into LaTex.

Konstanz, Germany Paderborn, Germany Hamburg, Germany October 2013 Jan Beran Yuanhua Feng Hartmut Hebbel

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#### Introduction

Jan Beran, Yuanhua Feng and Hartmut Hebbel

This edited volume consists of 30 original contributions in the two closely related research areas of empirical economic research and empirical financial research. Empirical economic research, also called empirical economics, is an important traditional sub-discipline of economics. The research activities in this area are particularly reflected by the journal "Empirical Economics" published by Springer-Verlag since 1976, and by the parallel series "Studies in Empirical Economics," which consists of 21 volumes published from 1989 to 2009 on different topics in this area. In recent years research in empirical economics has experienced another booming phase due to easy availability of very large data sets and the fast increase of computer power. This trend is reflected by the fact that the Econometric Society has published a new journal in quantitative/empirical economics, called "Quantitative Economics," since 2010. Stevenson and Wolfers (2012) note that the research in economics after the global financial crisis in 2008 is showing "a long-running shift toward a more empirical field, to the study of what hard data can tell us about the way the world really works." On the other hand, empirical financial research, also called empirical finance, has a relatively short tradition but the development in this area seems to be even faster than that of empirical economics, because, as indicated

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