Record Nr. UNINA9910830351403321 Autore Kleiber Christian <1966-> Titolo Statistical size distributions in economics and actuarial sciences [[electronic resource] /] / Christian Kleiber, Samuel Kotz Hoboken, NJ,: Wiley, 2003 Pubbl/distr/stampa **ISBN** 1-280-36604-4 9786610366040 0-470-24806-8 0-471-45716-7 0-471-45717-5 1 online resource (354 p.) Descrizione fisica Collana Wiley series in probability and statistics Altri autori (Persone) KotzSamuel 330.015195 Disciplina 339.2/2 339.22 Distribution (Economic theory) Soggetti Economies of scale Economics, Mathematical Insurance - Mathematics Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Statistical Size Distributions in Economics and Actuarial Sciences; Contents: Preface: Acknowledgments: 1 Introduction: 1.1 Our Aims: 1.2 Types of Economic Size Distributions; 1.3 Brief History of the Models for Studying Economic Size Distributions; 1.4 Stochastic Process Models for Size Distributions; 2 General Principles; 2.1 Some Concepts from Economics; 2.2 Hazard Rates, Mean Excess Functions, and Tailweight; 2.3 Systems of Distributions; 2.4 Generating Systems of Income Distributions; 3 Pareto Distributions; 3.1 Definition; 3.2 History and Genesis: 3.3 Moments and Other Basic Properties 3.4 Characterizations 3.5 Lorenz Curve and Inequality Measures; 3.6 Estimation; 3.7 Empirical Results; 3.8 Stoppa Distributions; 3.9 Conic Distribution; 3.10 A ""Log-Adjusted" Pareto distribution; 3.11 Stable Distributions; 3.12 Further Pareto-Type Distributions; 4 Lognormal

Distributions; 4.1 Definition; 4.2 History and Genesis; 4.3 Moments and

Other Basic Properties; 4.4 Characterizations; 4.5 Lorenz Curve and Inequality Measures; 4.6 Estimation; 4.7 Three- and Four-Parameter Lognormal Distributions; 4.8 Multivariate Lognormal Distribution; 4.9 Empirical Results

4.10 Generalized Lognormal Distribution4.11 An Asymmetric Log-Laplace Distribution; 4.12 Related Distributions; 5 Gamma-Type Size Distributions; 5.1 Generalized Gamma Distribution; 5.2 Gamma Distribution; 5.3 Log-Gamma Distribution; 5.4 Inverse Gamma (Vinci) Distribution; 5.5 Weibull Distribution; 5.6 Log-Gompertz Distribution; 6 Beta-Type Size Distributions; 6.1 (Generalized) Beta Distribution of the Second Kind; 6.2 Singh-Maddala Distribution; 6.3 Dagum Distributions; 6.4 Fisk (Log-Logistic) and Lomax Distributions; 6.5 (Generalized) Beta Distribution of the First Kind

7 Miscellaneous Size Distributions 7.1 Benini Distribution; 7.2 Davis Distribution; 7.3 Champernowne Distribution; 7.4 Benktander Distributions; Appendix A Biographies; A.1 Vilfredo Federico Domaso Pareto, Marchese di Parigi; A.2 Rodolfo Benini; A.3 Max Otto Lorenz; A. 4 Corrado Gini; A.5 Luigi Amoroso; A.6 Raffaele D'Addario; A.7 Robert Pierre Louis Gibrat; A.8 David Gawen Champernowne; Appendix B Data on Size Distributions; Appendix C Size Distributions; List of Symbols; References; Author Index; Subject Index

## Sommario/riassunto

A comprehensive account of economic size distributions around the world and throughout the years In the course of the past 100 years, economists and applied statisticians have developed a remarkably diverse variety of income distribution models, yet no single resource convincingly accounts for all of these models, analyzing their strengths and weaknesses, similarities and differences. Statistical Size Distributions in Economics and Actuarial Sciences is the first collection to systematically investigate a wide variety of parametric models that deal with income, wealth, and related notions.<p